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ABSTRACT

Presented are 14 analytical papers and/or narratives of selected elementary school programs that focus on changes in legal constraints, teacher preparation, instructional arrangements, and accountability procedures occuring in the movement to mainstream mildly handicapped children into regular classes. Two papers focus on the concept of advocacy with discussions on legislation and attributes of teachers for mainstreaming children. Among four advocacy programs described is a kindergarten/early childhood education program in North Carolina. Roles and strategies of teachers for individualization are examined in five descriptions of programs such as crisis resource training program at George Washington University (Washington, D. C.). Discussed in three papers are aspects of accountability such as an integrated behavioral systems model for education. Expressed as common to all the presentations is the following point of view: that handicapped children can be maintained in the mainstream when the educational goal is primarily concerned with all children's learning capacities and unique learning styles in a child-centered environment. Included are a review of the literature and an annotated bibliography of approximately 100 publications giving information pertinent to the issues and programs described. (Author/MC)

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CONFIGURATIONS OF CHANGE: THE INTEGRATION OF MILDLY HANDICAPPED CHILDREN INTO THE REGULAR CLASSROOM

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U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

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ABSTRACT

TO ANALYZE THE PROCESSES OF CHANGE OCCURRING IN THE MOVEMENT TO MAINSTREAM MILDLY HANDICAPPED CHILDREN FROM SELF-CONTAINED CLASSROOMS INTO REGULAR EDUCATION, THE AUTHORS HAVE CHOSEN TO LOOK AT FOUR PROBLEM AREAS COMMON TO ALL MAINSTREAMING PROGRAMS: LEGAL CONSTRAINTS, TEACHER PREPARATION, INSTRUCTIONAL ARRANGEMENTS, AND ACCOUNTABILITY PROCEDURES. THE ISSUES ARE EXAMINED IN ANALYTICAL PAPERS AND NARRATIVES OF SELECTED PROGRAMS. THE PREVAILING POINT OF VIEW IS THAT HANDICAPPED CHILDREN CAN BE MAINTAINED IN THE MAINSTREAM WHEN THE EDUCATIONAL GOAL IS PRIMARILY INDIVIDUAL GROWTH IN A CHILD-CENTERED ENVIRONMENT THAT CONSIDERS ALL CHILDREN AS LEARNERS AND RESPECTS THE UNIQUENESS OF ALL LEARNING STYLES.

TABLE OF CONTENTS

Introduction 1

Section 1: The Concept of Advocacy 9

The Law and That Other Minority 12
Alan Abeson and Frederick Weintraub

Openness and Advocacy: Teacher Attributes and Behaviors for Mainstreaming Children With Special Needs 45
Ellen Barnes and Peter Knoblock

Section 2: Advocacy Programs 73

Kindergarten-Early Childhood Education: North Carolina Opens Classrooms 76

Northwest Colorado Child Study Center: A Learning Analysis Approach 91

Yuba City, California: Team Planning for Integration 111

The Franklin Pierce Project: A Model in Transition 121

Section 3: Roles and Strategies for Individualizatio 133

Crisis Resource Training: The George Washington University 137

Parkway Elementary School: Organization for Individualization 148

Diagnosis and Prescription: A Route to Individualization 154
Sam Chimento

Brigadoon Elementary School: Individualized Instruction Through Continuous Assessment 168

The Madison School Plan: Engineering for Mainstreaming 181

TABLE OF CONTENTS (CONTINUED)

Section 4: The Concept and System of Accountability. 195

Accountability and Special Education. 198
William Garner

An Integrated Behavioral-Systems Model of Accountability for Education. 206
Charles H. Meisgeier and Francisco I. Perez

Toward a More Subjective Approach to Accountability. 229
Sam Henrie

Afterword 239

Review of Literature. 241
Robert Farrald

Annotated Bibliography. 257

INTRODUCTION

The movement of mildly handicapped children from self-contained classrooms into regular education is the theme of this report. This change is called "mainstreaming," and, as the term implies it is more than a simple technique - it is an amalgam of interrelated changes. It is founded on a collection of assumptions about the potential for academic and social growth of handicapped children, an accumulation of attitudes on the part of educators who have revised their former low expectations of handicapped children, and a series of responses to financial, managerial, and legal mandates for change in the education of handicapped children.

At this time, the field of special education is undergoing upheaval because of pressures from state legislatures for educational accountability; from state and federal litigation against the exclusion of handicapped children from the regular classroom, and discriminatory IQ testing; and from the reduction in local and federal funding for special education. To these pressures are added the stresses that result from requiring teachers, who were trained as specialists, to function as generalists in the classroom.

These factors have caused changes throughout the educational system - all the way from university training programs to teacher-generated programs in elementary classrooms. But the nature of change, like the nature of learning, is that it is a process of discovery which continues to produce new forms. When viewing the mainstreaming movement, it is necessary to remember that what is observed at any one time may, and perhaps should, be quite a different set of instructional and administrative arrangements than what will occur at a later date. Rather than judging, then, whether

a particular program is "successful" in mainstreaming the mildly handicapped, we tried to look for the broader issues and problems within the whole movement, and to present programs that confronted the problems and attempted solutions which seemed to offer the most flexibility to educators.

Once it was decided to focus on the problems of change in mainstreaming rather than to describe "validated" models, the issues began to emerge. Mere descriptions of programs seemed inadequate, because each school environment, with its accompanying physical, intellectual, and social climate is unique. The children, teachers, principal, superintendent, parents, and community create their own sets of expectations and goals against which outcomes can be evaluated, either formally or informally. In spite of the uniqueness of each situation, common problems are evident. Whether the program uses a resource room, a team teaching approach, an open classroom or learning center arrangement, a diagnostic/prescriptive teacher, an itinerant specialist, or any manner of gradual integration of handicapped children out of the self-contained classroom into the regular classroom, the relative frequency with which the same problems occur - across programs - is striking.

Four Major Types of Problems

We identified four broad areas of problems: at the federal and state level, the legislative constraints and mandates dictate certain program requirements, and cause a variety of problems. Also at the state level, the teacher training institutions affect the innovative programs, if they are unable to provide the schools with the skilled personnel they require. At the local level - the individual schools in this case - the instructional arrangement may be either facilitatitive or disruptive of the goals of

mainstreaming. And at the personal level for both students and teachers - the pressures for accountability heavily influence the life of the program and the people within it.

Within each of these levels there are more specific problems for program administrators and teachers. The reimbursement arrangement of special education within a state often requires program changes that hamper the mainstreaming of exceptional children. The attitudes of both special education and regular classroom teachers toward mainstreaming are a critical factor in the estimated success or failure of a program, and these attitudes are often a result of a particular kind of preservice or inservice training that the staff has been exposed to. The instructional management of the program is dependent on school policy about what should be taught, to whom, and in what way. Staff attitudes and special education funding also help to determine the instructional arrangement chosen and the consequent management problems. Finally, there are the informal politics of the community - the relationships between the local school and the district, between the principal and the superintendent, and between each of them and the board of education, and the relationships between all of these to the parents and the community at large. These relationships must be confronted because they set the criteria by which mainstreaming programs will be judged.

These discrete problem areas are intimately associated so that isolating them for examination often causes a kind of distortion of the whole. All of the programs presented in this report confronted all of these problems in different degrees, and no one program was an example of just one problem. However, we chose to group the programs under two headings: those which emphasize advocacy of the rights of all students to learn and

to grow in several directions besides the intellectual, and those which emphasize strategies for individualization of cognitive learning skills. A third section deals with the theoretical considerations of accountability.

Advocacy, Individualization, and Accountability

Legislative mandates to disband self-contained special education classes, resulting in pressures on teachers to accommodate previously excluded children in the regular classroom emerge from the concept of advocacy - legal and other actions on behalf of children's rights. These rights include the right to equal schooling, to respect, in spite of individual differences, and the right to learn in an environment that promotes success and fosters self-direction. In the following pages, Abeson and Weintraub clarify the legal issues in child advocacy, and Barnes and Knoblock describe the teacher as an advocate in the classroom. Following these pages, we describe several programs that represent an advocacy point of view.

In the second general grouping of programs there are several papers describing variations in strategies for individualizing instruction so that exceptional children can function with normal children.

Finally, we focus on accountability. Whether viewed as a tool to ensure that school people will be answerable for their professional actions and attitudes, or as a source of data that can be analyzed and used for the improvement of the instructional program, accountability has changed the educational climate irreversibly. No longer do schools have a monopolistic control over children. The public has expressed doubts about the competencies and even the intentions of school people to provide quality education for all children. In the courts and in the classrooms, equal rights for all children are being demanded, and

explicit in these demands is the demand for educators' accountability. We present three papers, representing differing points of view, to clarify this complicated issue.

Having set out to describe alternate methods of educating mildly handicapped children and to examine the broader issues, we tried to determine who these children are. The phrase, "mildly handicapped," has been used not so much as a description but as a catch-all for mildly retarded, emotionally disturbed, and learning disabled children. Until recently, children in academic or emotional trouble were often labeled according to their performance on standardized IQ tests. Generally, children whose scores fell between 65 and 80 were identified as educable mentally retarded, and recommended for special class placement, if such alternatives existed. Since the validity of IQ testing has been called into question as a determinant for classifying children for special class placement, both in the nation's courts and by classroom teachers, traditional usage of the term handicapped has been changing. In fact, at this time, most special education programs do not describe the student population in categorical terms. Instead, remediation or prevention techniques depend upon an assessment of these students' levels of functioning.

The integration of mildly handicapped children into regular classrooms remains the subject of this report - whether these children have lost their labels or are still categorized in some way as exceptional children.

Two Variations on the Theme - All Children Can Learn

The underlying assumption in mainstreaming is that all children, regardless of handicaps, are capable of significant intellectual and social growth. As individualized instructional techniques allow teachers to

ferret out the personalized learning styles of all children, it has become clear that many so-called "normal" children experience difficulties in school at some time, but that these difficulties are not sufficient reason to exclude them from regular education. Thus, the increase in individualization of instruction in the classroom has provided some flexibility for the inclusion of handicapped children. However, most individualization is based on the belief that the teacher is responsible for compensating for academic performance perceived as deficient in the child. If the child is seen as a vessel into whom a certain amount of basic competency must be poured, then to the degree to which that child cannot demonstrate what the teacher thinks the child should know, that child is seen as deficient, and the teacher is charged with the responsibility to bring the child's skills and knowledge up to some minimal standard. If this standard is not achieved, the child may not be able to remain in the regular classroom, or the teacher may be considered less than competent.

A radically different view, which other mainstreamers hold, is seeing the handicapped child as one who is whole--not deficient in relation to his own unique self--and one who is ready, willing, and able to learn whatever bears significance to his or her life needs and interests. In this view there is no standard performance level and, by the same token, no limit on the teacher's expectations of what the child may be able to learn during his/her life span. The simple descriptor, "learner," accurately applies. In a learning setting based on this view, the child is allowed to generate questions and activities of his/her own at his/her natural learning pace, and evidences of curiosity and uniqueness of

expression are encouraged, at the same time that necessary conformity to normal class patterns is gently but firmly required. The child is allowed not only to play with all ages and kinds of children but also to engage in peer-teaching.

This view is not intended to evade obvious realities: Children do have to learned specified facts and skills over specified periods of time, as regulated by state laws. Some children are extremely difficult to teach and require exceptional flexibility, time, and energy expenditures by the teacher. Implicit in such definitions of the handicapped learner and such designs for wholeness in learning is the requirement to perceive the unique individuality of the teacher, and his/her worthiness to receive individualized attention from principals, supervisors, and consultants.

It is becoming clear that advocates for the rights of children will need to take a next step if they would be truly pragmatic in their campaign to improve learning conditions for children. That step is to recognize and fulfill the working and training conditions teachers must have to adequately respond to the wholeness rather than the deficits in these children.

Critical to understanding both of these basic approaches to mainstreaming is the realization that mainstreamers do not attempt to dismiss or rewrite the facts of life for educationally handicapped children, but rather to concentrate on new ways in which they can be taught effectively and to create new expectations for educators about learning pace, learning styles, and teaching efforts and goals.

As mainstreaming practitioners believe that all children can be learners, so too they must assume that all grown people can be learners. In school where educators experience their jobs as opportunities for self-renewal

and growth, one sees more tolerance for individual differences among teachers and administrators. Where teachers and principals can admit to individual strengths and weaknesses, and share talents and problems, the infusion of handicapped children into the mainstream classroom does not become a whirlpool of bottled-up frustrations, defensive mechanisms, and resentments over daily unsatisfying experiences in the school. Thus, if educators would move away from concentrating on normative performance levels for children and think instead about the concept of individual growth, they must apply the same kind of thinking to the adults who work in the school.

Keith Beery a long-time advocate for self-renewal in education, advises educators:

> ...We believe, simply because you are a person, that our schools should be as supporting and growth-promoting for you as they should be for children. Further, we believe that schools cannot be supportive and growth-promoting for children unless they are these things for you!
>
> ...[T]he primary factors in determining school success for children, as well as adults, are awareness of control over one's own fate, a sense of community, and a sense of growth.*

This report of what is known about mainstreaming is miniscule in relation to what is unknown. To continue to explore new ways of enriching children's lives while absorbing and applying what others have learned is another way of saying that adult educators need to grow, to learn, and to be allowed to fail. The vision and wit to use all that we know, and the courage to seek for that which is still unknown, are qualities Americans have historically nurtured in themselves and their children. They are no less valuable -- even more imperative -- in the seventies and beyond.

*Berry, K. Models for Mainstreaming. San Rafael, Calif.: Dimensions Publishing Co., 1972, pp. 5 and 63.

THE CONCEPT OF ADVOCACY

This section considers recent efforts by those who view their work as advocating for the rights of children. Perhaps most visible is the advocacy chosen by those parents and teachers and their legal counsel who have gone to court and initiated litigation to change the laws governing education. Less visible, but equally important, are those advocates, mostly teachers, whose teaching styles reflect their belief that their job is to promote growth - not to compensate for children's deficiencies. Such teachers do not just dispense information - rather they address the whole child in their efforts to create classrooms where both children and adults can participate in shared learning and growth.

The two papers that follow both deal with the concept of advocacy as it is expressed in the court and in the classroom.

Abeson and Weintraub review recent landmark decisions in several states relating to procedures for identifying, assessing, and placing handicapped children in the public schools. Based on this review, they predict these procedures will be subject to four different kinds of pressure to change in the next decade. There will be more emphasis on due process to initiate and implement change in the treatment of children with special needs. The schools will create more flexible programming in response to individual needs. In one form or another, the special education contract will be widely adopted. Current labeling systems, based on psychological, medical, or other descriptive terminology will be abandoned in favor of functional definitions of the specific learning problems of specific children. Data collection will be based on more information than that obtained from standardized tests, and tests themselves will reflect a wide variety of cultural norms and learning styles.

The authors believe that the legal and educational status of the handicapped child is often directly related to the legal and educational status of minority groups. Several of the cases under review were fought and won under the aegis of the civil rights movement of the 50s and 60s. That movement still exists, and if advocates for the handicapped successfully press their demand for equal protection under the law from abuses of the majority, then the authors see the future role of the advocate as one of "no longer pleading, cajoling, or pressuring the education system. The role of the advocate [will become] monitoring - to assure compliance with the law."

Another way of working as an advocate for children's rights can be seen in a university setting where the teacher's role is perceived as one of advocacy for the child. At Syracuse University, Barnes and Knoblock say:

> To be an advocate is another expansion of the teacher role...It means that a teacher is a helper of a child, to make his/her present life more conducive to learning with joy, and his/her future more self-determined.

The Syracuse educators chose an open education approach as the form that best allows the classroom teacher to advocate for all children. Open education in Barnes' and Knoblock's view of it requires teachers to become aware of their own prejudices and value systems, and to attempt to "open" or "broaden the range of behavior [they can] accept in a classroom."

The method used to prepare future teachers to respond to a great variety of children's needs in the classroom includes "exposing teachers cognitively to different conceptual frameworks about children's behavior and helping them identify the approaches that most fit their own frameworks." Furthermore, "...helping teachers observe and describe child behavior rather than only evaluating it can aid teachers in clearing their vision and minimizing expectations and biases."

To familiarize future teachers with "...the effects of the school as an institution on children, and to increase their awareness of the pressures on the child's

life outside of school," will enable them to respond fully to the whole child - not just to his/her classroom performance.

The whole-child approach requires specific skills for working with other adults, as well as with children. The Syracuse teacher-educators thus train their students in joint problem-solving, active listening, giving feedback, and sharing talents with colleagues and parents. These abilities are considered essential, if the classroom environment is to meet individual needs - if handicapped and non-handicapped children are to experience growth and mutual support from each other, and from their teacher advocate.

THE LAW AND THAT OTHER MINORITY

Alan Abeson* and Frederick Weintraub*
The Council for Exceptional Children

It is the purpose of this paper to analyze recent litigation, legislation, and other legal and governmental issues and assess their impact on the future education of handicapped children. The temptation is great to play the role of "futurist," and in nonfuture shock fashion predict educational policy some 20 years hence. We shall try to constrain this temptation, and deal only with those issues that are already changing and seem likely to continue to do so.

Perhaps the best way to look at the forseeable future regarding education of the handicapped is to examine what has occurred in the recent past. As H.G. Wells noted "The past is but the beginning of a beginning and all that is and has been is but the twilight of the dawn..."

The history of government's involvement in the education of handicapped children can be characterized as being both of long and short duration. Long in the sense that government at the federal, state, and local levels has always had as one of its major functions the protection of society from those perceived as deviant and thus threatening to society, and, conversely, the protection of deviants from a society that assumed them incapable of coping with its demands. Thus our long history of mental institutions, home and welfare assistance, educational exclusion policies, etc. Short in the sense that it is fairly

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recent that government has had both the legal and moral responsibility to assure that all individuals, regardless of individual differences, are provided the opportunity to develop their abilities to the fullest, in the most normalized environment possible.

Certainly public provision of educational programs for handicapped children, particularly the mentally retarded, is not new. Although some programs for physically handicapped children were developed in the first half of the 19th century, it was not until 1896 that the first public school class for the mentally retarded was held in Providence, Rhode Island. The development of these programs over the next several decades was primarily the result of local school district initiative. By 1922, it was reported that there were 191 programs or classes in cities with populations over 100,000. These programs had no firm foundation, however, and tended to expand or decline depending on the availability of leadership, political pressures, funds, and teachers.[1]

It was not until the early 1900s and the formalization of these programs under state law that such educational services had a firm foundation upon which to grow. The first such law was passed in New Jersey in 1911. In 1920, Massachusetts mandated local boards of education to determine the number of handicapped children within their districts and to provide special classes to every ten or more mentally retarded children.[2]

By 1948, 1500 school districts reported special education programs.[3] Today, most school districts have some program or arrangement for such services with other school districts or agencies.

But despite substantial specific state and federal legislative and program developments, the goal of appropriate education for all handicapped children remains to be achieved. Recent state data indicate that 60 percent of all handicapped children are not receiving needed special education services, and

that one million are totally excluded from any free public education. This condition exists because of the belief held by many educators that programs for such children are not imperative, but are to be made available only when feasible, and the fact that school authorities have the power to remove individual children from education or deny them the special services they need, if such children or services threaten the well being of the school district.

This philosophy is best characterized by a 1919 Wisconsin Supreme Court decision, Beattie v. State Board of Education,[4] where the court stated, "The rights of a child of school age to attend the public schools of the state cannot be insisted upon, when his presence therein is harmful to the best interests of the school." This philosophy still pervades today as Winston notes, "Expulsions are necessary and should be carried out by school boards...."[5]

In 1954, the U.S. Supreme Court in Brown v. Board of Education,[6] stated "In these days it is doubtful that any child may reasonably be expected to succeed in life if he is denied the opportunity of an education. Such an opportunity where the state has undertaken to provide it, is a right which must be made available to all on equal terms." But these words too had no meaning for many years for handicapped children. It again took a federal court, in this case the U.S. District Court of Eastern Pennsylvania, to turn this condition around and declare that the 1954 decision applied to handicapped children as well. All children have the right to develop their abilities to the fullest in the most normalized setting possible. Thus the history of the future, in a sense, begins with the present.

This article will deal with four major changes that the future will bring. First, the elimination of the concept of uneducability: and the adoption of a zero-reject philosophy in public education.

Second, the elimination of the concept that educating the handicapped can

only be accomplished through deviant environments, programs, administrative finances, and designs: and adoption of policies and procedures that promote the greatest degree of normalization.

Third, the elimination of the concept that decisions about appropriate education placement rest solely in the hands of professionals: and adoption of procedural guarantees for parent and child participation in the decisions that affect their lives.

Fourth, the elimination of the concept that difference is by its very nature threatening to a healthy society: and adoption of policies that honor and safeguard each individual's rights to be different.

Educability and Education for All

First, the future may see the elimination of the concept of uneducability and the adoption of a zero-reject philosophy in public education. In 1937, John Dewey proclaimed that each child should be seen as:

> . . . equally an individual and entitled to equal opportunity of development of his own capacities, be they large or small in range. . . . [E]ach has needs of his own, as significant to him as those of others are to them. The very fact of natural and psychological inequality is all the more reason for establishment by law of equality of opportunity since otherwise the former becomes a means of oppression of the less gifted.

Although this concept of equal educational opportunities for all children has been advanced before and since 1937, it is only now that such an ideal is beginning to be realized. And it is occurring now only because groups of parents of handicapped children, professionals, and other advocates have involved the courts of the land to determine if their children, like all other children, are entitled to an education.

"Nancy Beth Bowman by her father, Horace Bowman" were the first child and parent named in the landmark lawsuit Pennsylvania Association for Retarded Children v. Commonwealth of Pennsylvania.[8] This case, brought in January 1971,

alleged that the state of Pennsylvania had failed to provide all retarded children with access to free public education. In addition to Nancy Beth Bowman, 13 other school-age mentally retarded children, who were representing themselves and the class of "all others similarly situated," and the Pennsylvania Association for Retarded Children were named in the suit as plaintiffs. Named as defendants were the state secretaries of education and public welfare, the state board of education, and 13 school districts representing the class of all of Pennsylvania's school districts.

The suit, heard by a three-judge panel in the U.S. District Court of the Eastern District of Pennsylvania, specifically questioned public policy as expressed through laws, policies, and practices that excluded, postponed, or denied free access to public education opportunities to all school-age mentally retarded children.

Testimony presented by expert witnesses focused on establishing a new definition of education indicating that all children can learn, that provision of systematic education programs to mentally retarded children will produce learning, and, finally, that the earlier these children are provided with eudcational experiences, the greater the amount of learning that can be predicted.

A June 1971 stipulation and order, and an October 1971 injunction, consent agreement, and order resolved the suit. The June stipulation established the due process rights of children who are or are thought to be mentally retarded in relation to obtaining a public education.

The October decrees provided that Pennsylvania could not apply any law that would postpone, terminate, or deny any mentally retarded child access to a publicly supported education, including a public school program, tuition or tuition maintenance, and homebound instruction. It further specified that, by

October 1971, the plaintiff children were to have been reevaluated and placed in programs, and that, by September 1972, all retarded children between the ages of six and 21 must be provided a publicly supported education.

In addition, the court indicated that local districts providing preschool education to any children were required to provide similar programs for the mentally retarded. The decree also stated that it was most desirable to educate these children in programs most like those provided to nonhandicapped children. Further requirements included that educational programs in institutions must be supervised by the state department of education, the automatic reevaluation of all children placed on homebound instruction every three months, and a schedule to be followed by the state to place all retarded children in educational programs by September 1, 1972. Finally, two masters (monitors) were appointed by the court to oversee the development of plans to meet the requirements of the order and agreement.

The decisions in the Pennsylvania case and in Mills v. Board of Education of District of Columbia,[9] in Federal District court six months later affirmed the opinion of the Supreme Court, originally expressed in Brown, that where the state has undertaken to provide education, "It is a right which must be made available to all on equal terms."

By these decisions the concept that some children are not educable was dead. No longer could education be viewed solely as the acquisition of academic skills. The decisions called for adoption of a new definition of education, presented as testimony in the Pennsylvania case that specified "Education is a continuous process of developing life skills needed for effective coping with developmental tasks and demands as well as with the environmental tasks and demands."[10] This definition of education thus ranks as equal all learnable skills whether the task is: to read basic functioning vocabulary or Chaucer;

to write an application for a job or a theme on metaphysics; or to compute multiple regressions, or the change received from a five dollar bill after purchasing lunch.

These decisions also strengthened the zero-reject concept. In essence, this concept means that no child can be denied his right to an opportunity for an education. Implementation of the zero-reject concept in concert with the new definition of education means that public policy makers and education officials must stop the many discriminatory practices presently occurring, and also revise numerous state laws and operating regulations that permit rejection. First and foremost, all practices, formal or informal, hat result in the exclusion of children from public school must be halted. Contrary to common knowledge, exclusion practices occur as a matter of normal procedure in many states. Authority for such practices is found in state constitutions and statutes. Additionally, other more subtle forms of exclusion are also practiced.

As an example of such a constitutional base, consider the New Mexico constitution which states that "every child of school age and of sufficient physical and mental ability shall be required to attend a public or other school during such period and for such time as may be prescribed by law." (Article XII, 5) Note the qualifier "of sufficient physical and mental ability" which has been used in New Mexico and other states to keep the schoolhouse doors closed to some handicapped children. Exclusion also occurs through the use of compulsory attendance laws which operate as nonattendance laws for the handicapped and can be found in virtually every state. Nebraska law for example provides exclusion for children where a "...physical or mental condition or attitude is such as to present or render inadvisable his attendance at school or his application to study."[11]

Another form of exclusion occurs directly as a function of laws governing the education of the handicapped.[12] Each state has some definition indicating categories of children eligible for participation in special education programs. The range of specificity of these laws varies greatly. In New Jersey, the law specifies the "mentally retarded, visually handicapped, auditorially handicapped, communication handicapped, neurologically or perceptually impaired, orthopedically handicapped, chronically ill, emotionally disturbed, socially maladjusted, and multiply handicapped."[13] In New York, the law merely specifies "children who because of mental, physical, or emotional reasons cannot be educated in regular classes."[14] Thus, if a child is placed (labeled) in a category of handicap which does not "legally" exist within some states, he can under the force of law be denied services.

Exclusion from special education programs also can occur because of limited program options. For example, in some states children who need home-bound or hospitalized instruction are unable to receive such services simply because there is no legal authority to provide such programs. Another device used is to deny the entrance of children into programs until specific behavioral conditions have been met. Most often this applies to the mentally retarded regarding the establishment of toilet training. Although recently changed, North Carolina regulations governing the eligibility of mentally retarded children to be admitted to programs for trainable children included the requirements that the child "be trained in toilet habits so that he has control over his body functions."[15]

Finally, in many states, those laws that do not require that education be provided to all children frequently require parents seeking appropriate educational programs for their children to locate private programs. Although 40 states presently have provisions to assist the parents of handicapped children

with the cost of private education, few provide for the total cost.[16] Consequently, the ability of some children to obtain an education becomes a function of parental wealth, which is clearly discriminatory.

In addition to children disqualified from attending school through the channels indicated above, there are countless others, most of whom are mildly handicapped with emotional or learning problems, who exist in a marginal world of education between the school principal's outer office and the outside world. These are the children who are not ever officially excluded, but are suspended, reinstated and suspended again who never participate in an organized and systematic educational program.

Children who are formally excluded from public education are only a portion of the handicapped who are denied appropriate educational opportunities. Traditionally it has been believed that these children, although not receiving an education commensurate with their needs, are in a position preferable to those who are totally disenfranchised. There is, however, a growing argument that this is not the case, that denying children an educational experience that permits them to learn is tantamount to excluding them from school. Thus an educable mentally retarded child with a reading disability that prevents him from understanding written material including books, teacher-made materials, and chalkboard instructions, who does not receive specially designed assistance, is in fact unable to profit from the education he is receiving.

The court orders written in both the historic Pennsylvania and District of Columbia actions contained language stating that the plaintiff children and the members of their class must be provided with a public education. But those orders went further. In PARC, the court said that all mentally retarded persons of school age shall receive "...an appropriate program of education."

Similarly in Mills, Judge Waddy ruled that "The District of Columbia shall provide to each child of school age, a free and suitable publicly supported education regardless of the degree of the child's mental, physical or emotional disability or impairment."

It is the opinion of the authors that it was the goal of the courts to establish the concept that education is a service that must be tailored to meet the needs of each child in order to be effectively delivered. All the evidence taken in these cases as well as extensive research, both casual and empirical, support this assumption - all children, when provided with a systematic individually determined program, regardless of the degree and kind of handicap present, can learn.

Those right-to-education lawsuits that have been completed and the 25 or more pending have based their allegation of the denial of equal educational opportunity on the provisions of the Fourteenth Amendment of the United States Constitution, which states that "no state shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any state deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws." In their decisions the courts have said unequivocally that denial of education is a violation of that amendment.

As indicated, the courts also have said that each child is entitled to an appropriate education.[17] Thus it can be reasoned that in this instance when the education of children with different needs is at issue, equal protection of the law means unequal access to an appropriate education. Such an approach is unique, for most often equality is defined as sameness. Bedau said "persons have (received) an equal distribution, equal treatment or equal rights, etc."[18]

The decisions in Hobson v. Hansen,[19] Serrano v. Priest,[20] and most recently in New Jersey, Robinson v. Cahill,[21] also defined equality on the "sameness" doctrine, that equal resources should be provided to all - even those who have unequal needs. Since our society reveres economic participation and independence, and if education is indeed the major societal process for achieving these goals, then a new concept of educational equality is needed. Coleman defined such a concept as "equality of results given different individual inputs."[22] This implies that equality exists when students, no matter what their behaviors or conditions may be as they arrive at school, successfully achieve educational objectives. More simply, equality under this concept is achieved when all children learn to read, regardless of the differentiated resources committed to that purpose.

The basic flaw here is that this concept assumes all children have innate capabilities for common educational achievement. Thus, we need only to provide crutches, or other remedial assistance, to assure that all children achieve the same goal. The Coleman definition requires modifications to apply to children with different learning needs. Educational equality should be defined then as equality of access to different resources to attain different individual goals.

The movement to provide every American child with the opportunity for an appropriate education that is taking place in state and federal courts and legislatures, as well as in administrative directive and practice, may well result in American educators adopting the following basic principles to guide behavior:

1. Every American child regardless of degree or type of learning handicap will receive a public education designed to meet his/her needs. The policy of zero-rejection of any child from an education will be implemented.

2. Because it is the responsibility of the American education system to educate all children, the focus on providing services to handicapped children will be in terms of making the mainstream more flexible and thus reducing the need for special programs outside the mainstream. Consequently, fewer children will need special education facilities, since mainstream education will be much more inclusive.

3. The traditional excuse of inadequate resources for the education of handicapped children will, because of constitutional guarantees, lose its meaning. Educators will be required to obtain additional resources, or reallocate those available so that all children receive an education.

Due Process and Educational Placement Decisions

Our predictions for the future indicate the right to an education for all children and the provisioning of such education by appropriate programs. The next logical question is - how are decisions of appropriateness to be made? We see the eventual elimination of the concept that decisions about appropriate education placement should rest solely in the hands of educators, and the adoption of procedural guarantees for parent and child participation in educational decisions affecting their lives.

Key elements of the complaints filed in PARC, Mills, and many of the other right to education cases allege that the manner in which handicapped children are identified, assessed and placed, or not placed, in regular or special programs violates constitutional guarantees of due process also provided through the Fourteenth Amendment of the United States Constitution. Specifically in Mills, it was alleged that "...plaintiffs were so excluded [from public education] without a formal determination of the basis for their exclusion and without provision for periodic review of their status. Plaintiff children merely have been labeled as behavior problems, emotionally disturbed, or hyperactive." Further, it was alleged that the children "...are excluded and suspended without: (a) notification as to a hearing, the nature of offense or status, any alternative or interim publicly supported education; (b) opportunity for representation, a hearing by an impartial arbiter, the presentation of witnesses; and (c) opportunity for periodic review of the necessity for continued exclusion or suspension."

While this litigation centered primarily on children considered for exclusion, other lawsuits have questioned decisions to place children in special education classes on the basis of evaluation instruments that are prejudicial to the children on the basis of spoken language, cultural background, and normative standardization. Much of the precedent in these cases is derived from Hobson v. Hansen.[23] In rulings that the "tracking" education placement system used in the Washington, D.C. Public Schools was illegal, Judge Skelly Wright considered the evaluation procedures the district used.

> Evidence shows that the method by which track assignments are made depends essentially on standardized aptitude tests which, although given on a system-wide basis, are completely inappropriate for use with a large segment of the student body. Because these tests are standardized primarily on and are relevant to a white middle class group of students, they produce inaccurate and misleading test scores when given to lower class and Negro students. As a result, rather than being classified according to ability to learn, these students are in reality being classified according to their socio-economic or racial status, or--more precisely--according to environmental and psychological factors which have nothing to do with ability.

In January 1970, a suit was filed in the District Court of Northern California on behalf of nine school-age Mexican-American students, Diana v. State Board of Education.[24] Plaintiffs all came from homes in which Spanish was the major language spoken, and all were in classes for the mentally retarded in Monterey County, California. The IQs of the children ranged from 30 to 72 with a mean of 63 1/2. When retested in Spanish, seven of the nine children scored higher than the IQ cutoff of classification as being mentally retarded, and the lowest score obtained was but three points below the cutoff. The average gain as a result of the retesting was 15 points.

The plaintiffs alleged that the testing procedures used by the schools for placement were prejudicial because they placed emphasis on verbal skills requiring facility with the English language, the questions were culturally biased, and were standardized on white, native-born Americans. It was further argued that in "Monterey County, Spanish surname students constituted 18 1/2 percent of

the student population, but nearly one-third of the children in classes for the educable mentally retarded."

Additional evidence presented included studies from the California State Department of Education, which corroborated the inequity. Of 85,000 children in classes for the educable mentally retarded in California in the 1966-67 school year, children with Spanish surnames comprised 26 percent while accounting for only 13 percent of the total school population.

The plaintiffs sought a class action on behalf of all bilingual Mexican-American children then in classes for the educable mentally retarded and all other children in danger of inappropriate placement in such programs. On February 5, 1970, a stipulated agreement was achieved requiring that:

1. Children were to be tested in their primary language and that interpreters could be used when a bilingual examiner was not available.
2. Mexican-American and Chinese children in classes for the educable mentally retarded were to be retested and evaluated.
3. Special efforts were to be extended to aid misplaced children in readjusting to regular classroom programs.
4. The state would undertake immediate efforts to develop and standardize an appropriate intelligence test.

One of the results of Diana was that the U.S. Department of Health, Education, and Welfare's Office of Civil Rights issued a memorandum[25] to school districts with substantial bilingual populations informing them that they would be in violation of Title VI of the Civil Rights Act, if students whose primary language was not English were assigned to classes for the mentally retarded on the basis of criteria that essentially measured or evaluated English language skills.

Since Diana, several cases have been filed on behalf of other minority groups, primarily blacks and Indians. Larry P. v. Riles[26] is a class action

suit filed on behalf of six black, elementary school-age children attending classes in the San Francisco Unified School District. It was alleged that they had been inappropriately classified as educable mentally retarded and placed and retained in classes for such children. The complaint argued that the children were not mentally retarded, but rather were the victims of a testing procedure that failed to recognize their unfamiliarity with white, middle-class cultural background and which ignored the learning experiences they may have had in their homes. The defendants included state and local school officials and board members.

It was argued that placement in classes for the mentally retarded carries a stigma and "a life sentence of illiteracy." Statistical information indicated that in the San Francisco Unified School District, as well as in the state, a disproportionate number of black children were enrolled in programs for the retarded. It was further pointed out that even though code and regulatory procedures regarding identification, classification, and placement of the mentally retarded were changed to be more effective, inadequacies in the process still existed.

The plaintiffs asked the court for a number of remedies to correct the alleged inequities including the use of more appropriate assessment instruments, declaring a moratorium on additional placements of black children in classes for the mentally retarded, retesting all such children placed in those programs, expunging school records, and others.

On June 20, 1972, the court enjoined the San Francisco Unified School District "from placing black students in classes for the educable mentally retarded on the basis of criteria, which places primary relevance on the results of IQ tests as they are currently administered, if the consequence of use of such criteria is racial imbalance in the composition of such classes."

Aside from the fact that the procedures for identification, assessment, and placement are in many situations inadequate, the resulting assignment of a label to a child, which may or may not be correct, produces four major problems. First, children who are so classified tend to become the victims of significant stigma, often resulting in isolation from normal school experiences, taunting by other children, and rejection by many school personnel.

Second, it is increasingly recognized that the assignment of a label to a child creates stereotyped expectations of behavior to those who work with him. This often contributes to a "self-fulfilling prophecy" in that the child, once assigned a label, is expected to conform to behavior associated with that label and ultimately so behaves. Further, it has often been found that once a child is labeled, and placement has been made on the basis of that label, there is often no escape from that placement or that label.

The third negative effect of labeling is that public and private agencies offering services, such as education, often determine the population they will serve on the basis of previously made and often incorrectly assigned labels. Thus, a child who has been labeled mentally retarded, but who also has a hearing impairment, may be denied the attention of the program or agency providing speech and hearing services, because of the label mentally retarded.

The fourth problem arising from current labeling and placement practices is that the assignment of a label, such as physically handicapped, often results in a child being placed in a special education program regardless of whether or not such a program is needed. In this instance, there are many children with handicaps (most often of a physical nature including orthopedic, hearing and vision impairments) who may not require special education programs.

While it is possible that some type of labeling will always be needed for the purpose of delivering governmental services to the populations they are

intended to serve, it is essential that government agencies reexamine their present systems of classifying children, and determine whether these systems stigmatize children beyond the point which is minimally necessary. As was pointed out in Fred G. Wolf v. Utah[27] "the worst form of stigma is that which is governmentally sanctioned, particularly when such stigma is unnecessary."

Prior to these recent civil actions, little attention was given either through statute or regulation to procedural processes required by law to govern identification, evaluation, and placement activities. At best, local school districts were required to assemble teams for consideration of often unspecified data and, possibly, to obtain parental consent for placement decisions. The decisions notably in PARC and Mills, as well as in more recent state legislation[28] make clear that now procedural safeguards required by the constitution must be provided during this process.

Most illustrative and probably typical are the following provisions established as part of the consent order in Pennsylvania. As defined by the court, change in educational status as specified in these provisions means "as assignment or reassignment, based on the fact that the child is mentally retarded or thought to be mentally retarded, to one of the following educational assignments: regular education, special education, or to no assignment, or from one type of special education to another." Whenever any mentally retarded or allegedly mentally retarded child, aged five years, six months, through 21 years, is recommended for a change in educational status by a school district, intermediate unit, or any school official, notice of the proposed action shall first be given to the parent or guardian of the child.

> Notice of the proposed action shall be given in writing by certified mail to the parent or guardian of the child.
>
> The notice shall describe the proposed action in detail, including specification of the statute or regulation under which such action is proposed and a clear and full statement of the reasons therefor, including specification of any tests or reports upon which such action is proposed.

The notice shall inform the parent or guardian of his right to be represented at the hearing by legal counsel, of his right to counsel, of his right to examine before the hearing his child's school records including any tests or reports upon which the proposed action may be based, of his right to present evidence of his own, including expert medical, psychological, and educational testimony, and of his right to confront and to cross-examine any school official, employee, or agent of a school district, intermediate unit or the department who may have evidence upon which the proposed action may be based.

The notice shall inform the parent or guardian of the availability of various organizations, including the local chapter of the Pennsylvania Association for Retarded Children, to assist him in connection with the hearing, and the school district or intermediate unit involved shall offer to provide full information about such organization to such parent or guardian upon request.

The notice shall inform the parent or guardian that he is entitled under the Pennsylvania Mental Health and Mental Retardation Act to the services of a local center for an independent medical, psychological, and educational evaluation of his child and shall specify the name, address, and telephone number of the MH-MR center in his catchment area.

The notice shall specify the procedure for pursuing a hearing which procedure shall be stated in a form to be agreed upon by counsel, which form shall distinctly state that the parent or guardian must fill in the form and mail the same to the school district or intermediate unit involved within 14 days of the date of notice.

If the parent or guardian does not exercise his right to a hearing by mailing in the form requesting a hearing within 14 days of receipt of the aforesaid notice, the school district or intermediate unit involved shall send out a second notice in the manner prescribed above, which notice shall also distinctly advise the parent or guardian that he has a right to a hearing and that his failure to respond to the second notice within 14 days of the date thereof will constitute his waiver to a right to a hearing. Such second notice shall also be accompanied with a form for requesting a hearing of the type specified above.

The hearing shall be scheduled not sooner than 20 days nor later than 45 days after receipt of the request for a hearing from the parent or guardian.

The hearing shall be held in the local district and at a place reasonably convenient to the parent or guardian of the child. At the option of the parent or guardian, the hearing may be held in the evening and such option shall be set forth in the form requesting the hearing aforesaid.

The hearing officer shall be the Secretary of Education, or his designee, but shall not be an officer, employee or agent of any local district or intermediate unit in which the child resides.

The hearing shall be an oral, personal hearing, and shall be public unless the parent or guardian specifies a closed hearing.

The decision of the hearing officer shall be based solely upon the evidence presented at the hearing.

The local school district or intermediate unit shall have the burden of proof.

A stenographic or other transcribed record of the hearing shall be made and shall be available to the parent or guardian or his representative. Said record may be discarded after three years.

The parent or guardian or his counsel shall be given reasonable hearing by legal counsel of his choosing.

The parent or guardian or his counsel shall be given reasonable access prior to the hearing to all records of the school district or intermediate unit concerning his child, including any tests or reports upon which the proposed action may be based.

The parent or guardian or his counsel shall have the right to compel the attendance of, to confront and to cross-examine any witness testifying for the school board or intermediate unit and any official, employee, or agent of the school district, intermediate unit, or the department who may have evidence upon which the proposed action may be based.

The parent or guardian shall have the right to present evidence and testimony, including expert medical, psychological or educational testimony.

No later than 30 days after the hearing, the hearing officer shall render a decision in writing which shall be accompanied by written findings of fact and conclusions of law and which shall be sent by registered mail to the parent or guardian and his counsel.

Pending the hearing and receipt of notification of the decision by the parent or guardian, there shall be no change in the child's educational status.

The importance of school districts adhering to legally defensible procedures cannot be overstated. In Pennsylvania, the court felt so strongly about rights of due process that they issued the above guidelines prior to their considerations of the right to education issue. In another right to education case in Michigan, Harrison v. Michigan, [29] which was dismissed on the basis of a state law already in force that requires the education of all children, the court said that it "...must assume that the state will act constitutionally, rather than unconstitutionally, in its implementation of procedural rules as to the twelve (plaintiffs)

as well as to the entire class." School districts simply must adopt such procedures as part of their daily operation.

The question of the use and consequent problems of labeling is presently the subject of intensive and extensive examination (Project on Classification of Exceptional Children, Vanderbilt University). Other proposals to describe children's educational needs in terms of a variety of educational placements and allocations of people and dollar resources are also being explored. One of these approaches is called the special education contract and was originally described by Gallagher.[30]

The basis of the special education contract is that a formal and legal relationship is entered into by the public school officials, the parents, and the child in need of special education services. The binding upon all parties contract includes in its terms the specific responsibilities that will be undertaken by all parties to see that a previously developed individually prescribed program is, in fact, provided. Specific provisions in the contract would include at least the following:

1. The specific and measurable objectives to be realized by the child.
2. The criteria and method for determination of the achievement of those objectives.
3. The specific activities that will be undertaken by all parties to the contract to achieve the desired objectives.
4. The allocation of people, dollar, and time resources to achieve the objectives.
5. The schedule for the measurement of short- and long-term objective attainments as established in the individually prescribed program.
6. Penalties to be applied to any parties to the contract failing to execute their responsibilities.

Use of the contract approach has a number of advantages over present systems used to educate handicapped children. First, this approach builds

a legal basis for the delivery of educational services to children with special learning needs who are not having those needs met. Second, since educational services will be delivered to children on the basis of educational objectives to be attained, no potentially negative labels will be needed. Requests to government for resources can be presented on the basis of the numbers of children who within the next year, for example, will learn to recognize and understand the meanings of a 25-word list related to basic community functioning. Both broader and more specific groupings of objectives can be presented.

Implementation of a contract approach is a logical extension of the due process procedure. Because of procedural safeguards, proposals to change the educational status of a child require, as indicated, the collection and analysis of varied information about a child, designed to guide a decision as to the best educational placement. Determination of the placement then is based first upon a determination of needs, and then upon the establishment of the individual program needed, and, finally, a recommendation for a placement where that program can be provided.

Finally, the demands for accountability that are being placed on the public schools can be extended to the child and his parents. Because the objectives and responsibilities for their achievement are specified in the contract, then the cause of failure may be identified, whether the fault be with the school, the child, and/or his parents. Achievement of the objectives provides the schools with the greatest data possible to answer questions of accountability, because not only can they total such accomplishments they also can specify by objective the people, dollar, and time resources required.

The special education contract represents a radical approach, but the denial of appropriate education to many American children may require a radical solution. The power of the law is great, whether it be legislative, judicial, or contract change. Finally, use of the contract will open the schools and the decision-making processes to include parents in an honest manner and in a full partnership role.

As a result of the present turmoil relating to the identification, assessment, and placement of all handicapped children in appropriate education programs, the following behavior changes for the public schools can be predicted:

1. Procedures of due process will be used to govern changes in the educational placement of children with any special needs. These procedures will be carried to hearings challenging the recommendations of the public school with increasing frequency for a short time.

2. In response to the challenges mentioned above, and due process itself, the public schools will create more flexible programming patterns to better meet the individual needs of children. The special education contract in one form or another will be adopted by the public schools.

3. Classification systems will be based upon specific learning needs of children rather than psychological, medical, or any other descriptive systems.

4. The present level of dependence upon standardized tests will decline and will be followed by more extensive use of information collected from home, school, and community. New tests more adequately reflecting various culture norms and learning styles will be developed and used, but with constraints learned as a result of the present overuse of tests.

From Deviancy to Normalization

This leads to our second prediction that the future will bring about the elimination of the concept that handicaps only can be ameliorated through deviant environments, programs, administrative designs, and finances, and that policies and procedures that promote the greatest degree of normalization will be adopted.

The previous discussion of "equal protection" had at its core the concept that all individuals start and remain as equal and are provided differentiated services depending upon need. But there must always be an assumption that services within the education system vary in their degree of normalcy. By this we mean that there are services provided to most students that create no stigma and that do not deprive the individual of liberty more than any other individual. At the other extreme, there are needed services that do create stigma and do limit individual liberty. Thus, a regular classroom program in education represents normalcy while an institutional setting might represent the greatest degree of abnormalcy, because it is in fact the most restrictive environment. Reynolds and others have displayed the wide range of school services on this model.[31] What we are suggesting is that within the construct of appropriate education for all handicapped children there exists a wide range of appropriate services, and that such services can be plotted on a continuum ranging from the most normal, or least restrictive of individual freedom, to the most abnormal, or most restrictive of individual freedom.

All individuals must enter the education system at its least restrictive point, in other words, and may move in the direction of more restrictive programs if such programs are 1) freely chosen by the individual or 2) shown to be imperative to meet stated objectives.

A number of recent court decisions have bearing on this issue. In 1962, a woman was taken into custody by police in the District of Columbia after being found wandering about the city in a state of confusion. After psychiatric observation which indicated the woman was suffering from senility, the woman was committed to a mental hospital. The psychiatrist noted that the woman was not a threat to the community, only a threat to herself. The woman filed

a writ of habeas corpus. The trial court denied her petition, Lake v. Cameron.[32] The U.S. Court of Appeals reversed the trial court and in doing so laid down a most important principle:

> Deprivations of liberty solely because of dangers to the ill persons themselves should not go beyond what is necessary for their protection...
>
> Appellant may not be required to carry the burden of showing the availability of alternatives...[She] does not know and lacks the means to ascertain what alternatives, if any, are available, but the Government knows or has the means of knowing and should therefore assist the court in acquiring such information...

Based on this ruling, it appears that when a continuum of treatments varying in degree of deprivation of individual liberty are available, government can only require the treatment that is least delimiting to the individual's rights. Equally important is the fact that the court placed the burden on the government to be familiar with and make known the alternative treatments.

In two school desegregation cases, McLaughlin v. Florida,[33] and Loving v. Virginia,[34] the Supreme Court established a "yardstick" for determining when a procedure was constitutionally offensive. The high court ruled that racial distinctions, differentiations, and classifications are constitutionally offensive, unless the state is able to justify them as essential to the accomplishment of an otherwise permissible state policy. As in Lake, the court emphasized that when alternatives were available, it would be difficult to justify a practice that limited or discriminated against individual liberty.

Recent state legislation also is dealing with this issue, specifically as it relates to the handicapped. A new Tennessee law states that:

> To the maximum extent practicable, handicapped children shall be educated along with children who do not have handicaps and shall attend regular classes. Impediments to learning and to the normal functioning of handicapped children in the regular school environment shall be overcome by the provision of special aids and services

rather than by separate schooling for the handicapped. Special classes, separate schooling or other removal of handicapped children from the regular educational environment, shall occur only when, and to the extent that the nature or severity of the handicap is such that education in regular classes, even with the use of supplementary aids and services, cannot be accomplished satisfactorily.[35]

A similar law has been put in force in Massachusetts written in language that clearly sets the tone for the right of handicapped children to an appropriate education. "Until proven otherwise, every child shall be presumed to be appropriately assigned to a regular education program and presumed not to be a school-age child with special needs or a school-age child requiring special education."[36]

This statute accurately forecasts the future, for it states initially that, every child will receive an education. Second, by indicating that various alternative education settings are available for instruction, it states that children with varying learning needs are entitled to an education designed to meet those needs. Finally, the statute states unequivocally that every child will be "presumed" capable of benefitting from a regular education program, which means that the basic philosophy of the Massachusetts public schools is that <u>all</u> efforts for providing children with an education are to occur in the mainstream. Thus, the focus is on maintaining children in regular programs, until evidence has been accumulated that more restrictive settings may be more preferable. Programming under this statute placed the emphasis on <u>keeping</u> children in the mainstream, rather than reentering them into regular programs.

What this means to educators is that beyond providing education to all children, they are obligated to provide such education in the least restrictive manner. If a child needs a resource room program,

then he can't be placed in a special class; or if a child needs a special class, then he can't be institutionalized. The fact that a particular service is not available does not justify the requirement of a more restrictive alternative. Certainly, if an individual has a wart and dermatologist is not available, we don't allow the surgeon to remove the entire arm.

One major obstacle to effective implementation of these concepts is the fact that in many school districts special education services are segregated from the mainstream of education by administrative and policy patterns. The debate over special versus general education has echoed throughout our profession for years. It is an irrelevant debate for the only solution is to educate appropriately. All children are the responsibility of the same education system--no more, no less. It is that system's responsibility to distribute its varied program resources in a fashion that assures appropriate education. The superintendent is responsible for all the children and for securing and allocating the resources necessary for their education. The director of special education is responsible for the efficient deployment and operation of certain services or programs, but the children who are served in his programs are under the aegis of the whole system. We must certainly advocate for their needs and provide quality services where appropriate, but we must not allow the system to segregate children unto us. For to do so, reduces the educational and life options that these children should have and makes them inherently unequal. As the Supreme Court in Brown pointed out, separate but equal is inherently unequal. And as Judge Wilkens of the Third Judicial District Court of

Utah so eloquently stated in Fred G. Wolf v. The State of Utah:

> The policy of placing these children under the Department of Welfare and segregating them from the educational system can be and probably is usually interpreted as denoting their inferiority, unusualness, and incompetency. A sense of inferiority and not belonging affects the motivation of a child to learn. Segregation, even though perhaps well intentioned, under the apparent sanction of law and state authority has a tendency to retard the educational, emotional, and mental development of the children.[37]

The Right to be Different

What this paper has really been about is the right of people to be different, the inability of the American education system to accept and nurture differences, and our hope that, in the future, we will eliminate the concept that differences are by their very nature threatening to a healthy society and adopt policies that honor and safeguard the right of each individual to be different: That we will make sure that the institutions of society, particularly education, present no barriers to such differences. Often we see only the immediate impact rather than the long range affect of our actions. The psychologist in Diana who tested a Spanish-speaking child in English did not perceive himself as a part of a conspiracy against Mexican-Americans, but his single act coupled with others may have conveyed that image to Diana and her family and community. The child who is suspended, for what may appear to be a good cause, but without due process, may believe in the long run that this is a society not of law, but of arbitrary and capricious tyrants. The child in a wheelchair, who must go to a special school for no other reason than a flight of steps bars her entry to the school her neighbors attend, learns in addition to reading and writing, that this is, in fact, a

hostile society.

Discrimination against the handicapped not only affects the handicapped, but robs the larger society of the talents and labor of otherwise richly endowed individuals, who but for the way their handicaps were viewed, might contribute much more to society than is presently the case. A member of the Congress, in a recent discussion with one of the authors, pointed out that he had always had difficulty understanding why the handicapped were so discriminated against in adulthood, until he began to examine their education and found that the average nonhandicapped child goes to school only with other mirror-image children, while the handicapped go to special schools or classes on special busses. He began to realize that while we preach to children to be accepting of differences, we allow those systems that have the most impact on children's lives to practice the bigotry that we piously hope the children as adults will disavow. It is easily understood how a businessman, who during his school years saw no handicapped children in school, who knew that they were shunted off somewhere else, and who conjured negative images of these children he never knew, would be hesitant to hire a handicapped person.

Given these realities, why our optimism about a better future? Several trends contribute to such optimism. First, law has historically been the means by which minorities have protected themselves from the abuses of the majority. The civil rights movement provided such protection and advanced the status of many minorities. This same route is increasingly opening previously closed doors for the handicapped. The right to education, due process, appropriate education, open educational options, and the elimination of architectural barriers

are no longer merely issues to be discussed in journals or at conventions, or actual agenda for a just few well-meaning individuals, but are now increasingly the law of the land. The role of the advocate no longer need be one of pleading, cajoling, or pressuring the education system. The role of the advocate is monitoring - to assure compliance with the law.

Second, Americans are basically law abiding people. Thus we believe, and research has shown, that we will internalize laws that we have imposed upon ourselves, eventually adopting the behaviors they require as our own. Certainly there will be violations, particularly from those who only internalize the behaviors and never learn the principles. A school district that was under court order to admit mentally retarded children into their education program did so, but promptly passed a policy stating that no mentally retarded children could try out for the cheerleading squad, thus demonstrating that they had not really understood the principle of equal protection.

Third, there is an old saying "proximity breeds liking." Perhaps all that can be done today is to bring the handicapped and the non-handicapped into proximity, to guard against major abuses, and to hope that the next generation of students and educators will be more capable of eliminating more of the insidious discriminatory practices existing today.

Finally, the recent court victories, legislative triumphs, and administrative confrontations have given the handicapped and their advocates a new self-perception. They no longer will accept tokenism. They know that they are entitled to certain rights today and will accept no delay. They realize the fiscal and adminstrative problems involved, but will not accept the solutions to these problems as their responsibility. They will no longer behave nicely when asked to accept second

class status. But most importantly they now see themselves as human beings and citizens, and will accept nothing less than equal justice. Tom Gilhool, the lawer for the plaintiffs in PARC, provides a beautiful example of this new awareness.38

> On October 7, 1971, the Court ordered that each of the 13 plaintiffs in the Pennsylvania case should be placed within one week in a program of education and training appropriate to them. One of the plaintiffs, a child and her parents, were visited by a school official of one of the defendants and the school official said, "We have the order. Tell you what, we're going to do you a favor, we're going to give Kate another chance." The parents said, and you'll excuse me for translating it, "No, you're not. You're not going to do us a favor; you're not going to give Kate another chance. You're going to give Kate that to which she is entitled."

If the future we see as inevitable appears threatening, then perhaps it is necessary. But our hope is that it be a challenge to all of us to make available to handicapped children the appropriate educational opportunities they need. This is nothing more than we would want for ourselves and our children.

FOOTNOTES

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OPENNESS AND ADVOCACY: TEACHER ATTRIBUTES AND BEHAVIORS FOR MAINSTREAMING CHILDREN WITH SPECIAL NEEDS

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Introduction

This paper focuses on the belief that the openness of teachers and classrooms and the advocating for the educational rights of handicapped children all contribute to the mainstreaming of those children into regular education programs. We begin by discussing the role of the teacher as advocate for the child and suggest some training activities for the many behaviors which accompany this role. In the preparation of teachers as advocates we have been involved in teacher education both at the university and public school levels. For the past four years at Syracuse University we have been part of the development of more innovative ways to prepare teachers of children with special needs. (See Knoblock, Barnes, Eyman, 1972.) One of our guiding concepts is that the truly involved and responsible adult (teacher or other adults within the schools) needs to respond to more of the totality of a child's world. This means that there are many "out of the classroom" experiences and activities to be engaged in on behalf of the child.

Following this section, we will present a brief description of one morning's class in which one teacher, 15 "educable retarded" children, and other adults all attempted to live an open classroom approach. This particular teacher actively pursued mainstreaming of these children back into regular programs and accomplished this to some extent. Her premise was that by creating an open classroom environment she enhanced the chances of her children gaining the necessary skills and experiences to function

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satisfactorily with others in the school. We point out some of the basic ingredients of her open classroom and close by specifying some of the behaviors, activities, and strategies regular and special class teachers can utilize to develop more open approaches with children.

The Teacher as Advocate

The traditional definition of a teacher's role has been one of the passer-on of information, the dispenser of cultural knowledge, within a prescribed time and place (school). In special education the conception of teacher role has been broadened to include responding to particular aspects of a child's individuality--e.g., his expression of emotions, his ability, or "disability"--still in relation to his learning performance.

But a child's life is much more complex than a classroom, and his behavior is influenced by many forces outside the school. For a teacher to respond to the whole child, she must know what his experience is and she may need to influence that experience, even outside the boundaries of Room 202; she must be an advocate ("one who pleads for another, a counselor") for the child in his life in school and out. To be an advocate is another expansion of the teacher role, far beyond dosing children with facts. It means that a teacher is a helper of a child, to make his present life more conducive to learning with joy, and his future more self-determined. There is a need for advocate-teachers for all children, but especially for children with difficulties - whether they be labeled educable retarded, emotionally disturbed, or learning disabled. On the following pages we attempt to specify behaviors of an advocate-teacher and to suggest a model of training for those behaviors.

Training for Advocacy

At Syracuse University in the Division of Special Education and

Rehabilitation, we have had a special project funded by the Bureau of Education for the Handicapped (USOE) to train teachers for city children with special needs.[1] This program has attempted to utilize an advocacy focus in helping the trainees work with children who are partially or totally excluded from school. Our goal for many of these children was to return them to the mainstream of education--finding the best possible placement for them, so that their futures as self-supporting members of the society were not in jeopardy.

The content of the training program in the area of advocacy covers four main topics:

1. Teacher Values, Empathy, and the Definition of Deviance
2. The Institutional Press
3. Awareness and Use of Community Resources
4. Skills with Adults

We will describe as concretely as possible experiences and information utilized to deal with each of these topics and give examples of the behaviors of the teachers with their children.

Teacher Values, Empathy, and the Definition of Deviance

"Mainstreaming" children with special needs into regular education can only be successful if the teacher of these children truly accepts and values them; if the teacher, in fact, discriminates against the children and is not active in their behalf, then "mainstreaming" does not occur. The first step toward integrating special children is to deal with a teacher's stereotypes and feelings about the children and, through efforts at empathy, attempt to broaden the range of behavior that a teacher can accept in the classroom.

This topic is directed toward helping the teacher see more clearly

(a) his or her own frame of reference, values, and stereotypes, and (b) the child and the meaning of the child's own experience (empathy). Each of us looks at the world and the behavior of others through the screen of our beliefs and values; for a person who is in a position to strongly influence others (because of role, authority, charisma, or whatever), it is particularly important to be aware of his or her biases and point of view.

Behavior which one teacher sees as deviant or abnormal and attempts to change may not bother another at all. Ullman and Krasner describe this in their book, A Psychological Approach to Abnormal Behavior:

> Behavior which is called abnormal must be studied as the interaction of three variables: the behavior itself, its social context, and an observer who is in a position of power. No specific behavior is abnormal in itself. Rather, an individual may do something (e.g., verbalize hallucinations, hit a person, collect rolls of toilet paper, refuse to eat, stutter, stare into space, or dress sloppily) under a set of circumstances, (e.g., during a school class, while working at his desk, during a church service) which upsets, annoys, angers or strongly disturbs somebody (e.g., employer, teacher, parent, or the individual himself) sufficiently that some action results (e.g., a policeman is called, seeing a psychiatrist is recommended, commitment proceedings are started) so that the society's professional labelers (e.g., physicians, psychiatrists, psychologists, judges, social workers) come into contact with the individual and determine which of the current sets of labels (e.g., schizophrenic reaction, sociopathic personality, anxiety reaction) is most appropriate. Finally, there follows attempts to change the emission of the offending behavior (e.g., institutionalization, psycho-therapy, medication).
>
> The label applied is the result of the training of the labeler and reflects the society which he represents. The labeling itself leads others to react to the individual in terms of stereotypes of that label (e.g., "Be careful, he's a dangerous schizophrenic"; "Poor girl, she's hysterical").[2]

A teacher who had an open classroom for "emotionally disturbed" children described the same phenomena in terms of perceptions of strengths and

weaknesses:

> One thing that I think is really important is to look at a kid in terms of strengths and not weaknesses. I feel many times the things people identify as weaknesses really can be strengths. For example. . .there was a girl in the class who had had a lot of trouble because she was so extremely active. She was labelled "hyperactive." Now, it turned out that she used a lot of that activity to help other kids who were more withdrawn and more passive. In other words, she had all this activity inside of her and what she really needed was some way to direct it. And she was able to direct it in a good sort of way, if there were some alternatives open to her. Before, the only sort of experience she would have in school would be trying to control herself. So, basically, I just saw that a lot of the kids' "Problems" could be used to advantage in school.[3]

Many data are available to substantiate the self-fulfilling prophecy of teacher expectations. Daniel Fader's book, The Naked Children, is a very readable discussion of the "functional illiteracy" of many bright inner-city children, whose teachers do not expect them to learn to read. Teachers should explore their prejudices as well about minority group children.

We attempted to expose teachers cognitively to different conceptual frameworks about children's behavior and help them identify the approaches that most fit their own frameworks. We used A Study of Child Variance, A Conceptual Project in Emotional Disturbance, Rhodes & Tracey, 1972, University of Michigan Press. This project covers biophysical, sociological, behavioral, ecological, psychodynamic, and "counter-theory" points of view. More in depth work can be done by reading individual theorists. For instance, we discussed comparative ideas of human growth, therapeutic interventions, and applications to teaching after seeing a film of Carl Rogers, Fritz Perls, and Albert Ellis, and reading some of their works; we each indicated which therapist we would prefer and why, and tried to relate that to what we do with others in our role as helper

(teacher, therapist).

We designed some active experiences for teachers to look at their values, stereotypes, and expectations. Many of the value clarification activities suggested by Sidney Simon and associates[4] can be adapted to deal with issues of teachers and children and provoke thoughtful discussion. Some examples are:

Forced choice: Which would you rather work with--
Retarded or Gifted Children?
Retarded or Disturbed Children?
Why?

Think of the children with whom you are now working. Rank them according to the amount of time you spend with each of them. Then, indicate by placing an E next to those where you enjoy the time spent. What do you do most with each child, e.g., mothering, controlling, academic help, etc.? What is it about the children with whom you spent more time? little time? (e.g., do you enjoy them? do you think they need you?)

Role-playing can also be useful for identifying a person's stereotypes about labeled children. The behavior a person chooses in playing a retarded child or a disturbed child--as well as how he or she might intervene when role-playing a teacher--reflects their definitions of children with special needs.

Helping teachers observe and describe child behavior rather than only evaluate it can aid teachers in clearing their vision and minimizing expectations and biases. We have utilized live or videotaped situations of an individual child and teacher; we each observed and recorded the same scene. Afterwards we compared observations--attempting to only describe behavior rather than interpreting or evaluating it. For example, instead of saying, "John did not answer when the teacher asked what he was doing," many teachers wrote "John was insolent" or "John did not hear the teacher" or "John ignored the teacher." Each of these latter statements

makes an assumption about John which is not necessarily evident only from his behavior. Discussing this process with teachers often revealed assumptions they make about children that they might not be aware of and which other teachers might not share. It becomes clear that to understand what is really happening with John, the teacher must ask John.

Role-playing activities can also help teachers see children (as well as themselves). Adults role-playing children can begin to understand the child's perspective. An example is given below:

> An activity originating with Janet Lederman, author of Anger and the Rocking Chair, is that two adults pair up, one designating herself an autistic child and the other, the teacher-helper. The "child's" goal is to not respond, to maintain her isolation/integrity at all costs; the "teacher" uses any means (physical, verbal) to open the child up and have her respond. After a time the individuals talk about their experiences--for the "child" what the "teacher" did that did or did not work, for the "teacher" what she instinctively tried first, how they both felt about the experience. Then, the roles can be reversed.

Many other exercises exist that help teachers identify feelings in themselves and others.[5] In addition, simulation of the labeling/segregated experience can be designed. We gave our teachers a content test on special education, scored them, and divided the group according to those who had done well and those who had not (as if this were an IQ test). Those who did less well were physically segregated, not allowed interaction with others, given more "structure" and remedial work. As this experiment wore on an hour, the teachers designated as "EMR" responded vividly and emotionally to the experience.

Discussions of teachers' own experiences in school (the best, the worst, when they felt different from others) can retrieve for them their memories of childhood and help them identify with children. Often art

materials can be utilized as a means of expression and as a basis for discussion. For example, provide a variety of art supplies and ask each teacher to represent with them a timeline of memorable school experiences, or an incident or time in school in which he or she felt isolated or deviant. Then, the teachers can talk in pairs or in small groups about the representations. All of these active experiences are designed to help teachers explore their own feelings and empathize with those of children.

Talking with children (and adults) who have been labeled and segregated can also give a teacher insight into the effects of labeling on a child's self-concept. At Syracuse we have interviewed a number of excluded children and youth about their experiences, and they are very articulate. One excluded 14-year-old youth who joined our program said,

> I used to think I was completely messed up. . .and nobody liked me or wanted me. Now. . .[I see] there are lots of people hurting, and I guess that makes me feel better. That way, I'm not. . .different.

The Institutional Press

This topic--the institutional press--is designed to acquaint teachers with the effects of the school as an institution on children and to increase their awareness of the pressures on the child's life outside of school (neighborhood, court, agencies, home). With reference to schools, teachers should become familiar with research and opinions on special classes for retarded and disturbed children, as well as the legal aspects of special education (the processes of exclusion used by the local schools, and the rights of children and parents).[6] Many studies have been published in recent years evaluating the effects of special classes on the achievement and self-concepts of the children in them.

In addition to reading about special classes, we have encouraged teachers to observe a variety of special education placements (residential settings, special classes, resource programs, etc.) and, if possible, to follow through on a case in which a child is referred, tested, labeled, and placed, so the teacher can see the process for herself. Then, the wide range of children in a special class and the sometimes casual labeling and placing process will be apparent.

A school psychologist reported that she had been called to reevaluate a child who had been in an EMR class for two years; the current teacher felt that the child was very bright. Checking past records, the psychologist discovered that at the time the boy tested below 75 and was placed in a special class, his records showed that he was reading three grades above his grade level! Teachers should be aware of the content of tests, their inaccuracies and biases and the situational factors that affect test performance. Rather than accepting the labels previously placed on a child, a teacher should look at the child individually and do her own diagnostic evaluation. A high number of children placed in special classes are members of minority groups, which also should raise many questions for those who put them there.

Teachers and parents should be aware of the legal rights that children have in each particular state. Some advocacy organizations have been publicizing steps parents may take to be sure the best possible placement is guaranteed their child and, also, serving as legal advisors for parents who wish to challenge institutional responses to their child.[7]

In addition to information about school procedures and children's rights, teachers could find it valuable to be aware of aspects of a child's life besides school. This means contact with parents and home visits; it

means gaining a sense of the neighborhood in which the child lives. Consider spending a day at Family Court, at the welfare office, or in a neighborhood legal service. An effort to understand the child's home and neighborhood life is particularly important when there are cultural differences between the teacher and the child.

Awareness and Use of Community Resources

Related to a teacher's understanding of the press of institutions on the child is his/her awareness and use of community resources for aiding the child. Our group of teachers divided up the programs available in the city, called or visited, and came back together to pool the information (services offered, to whom). School systems have a number of services (homebound tutors, aides, resource teachers, social workers) that can aid children and teachers in need. Other groups we have found helpful are neighborhood legal services, alternative schools, special clinics operated by universities and hospitals, neighborhood recreation programs, university and city volunteer centers.

We have met a number of teachers in schools around the city who have been responsive to children with special needs. For teachers, participating together on a case conference can be helpful in learning problem-solving skills to aid a difficult child and his teacher. Often, a responsive program means increasing the number of adults in the classroom.

Skills with Adults

For a teacher to be an advocate for a child, she must have skills with adults--to gain support, to help other teachers, administrators, parents, agency workers. Practice in some of these skills--including active listening, joint problem-solving, giving feedback, sharing skills

and resources--can be gained through exercises such as those suggested in Thomas Gordon's Parent Effectiveness Training, or literature produced by sensitivity training organizations.[8] According to Carl Rogers, a person needs to convey empathy, acceptance, and authenticity, in order to be a helping agent to another. Definitions of help and support, also, vary with individuals; the Educational Testing Service study[9] by Amarel, Bussis and Chittenden (interviewing teachers regarding support) lists the following behaviors that teachers felt were supportive:

problem-solving	modeling
demonstrating	observing and discussing
stimulating	provoking
respecting individuality	challenging
providing alternatives	administrating
explaining	helping as extension of teacher

These excerpts from the diary of one of our trainees gives some examples of responding to a teacher in the interests of a child; in this case, the trainee was attempting to lengthen the hours in class of a child who had been excluded a half day. (By May the child was in school full-time.)

> "Every other Tuesday I'm having conferences with R.'s teacher. It feels good to me to have a regular time for us to talk. . .This week I was quite pleased with all Mr. M. (the teacher) said. He really feels R. is doing better--more cooperative and more willing to try.
>
> Mr. M. is also trying really hard. As of next week R. will be staying until 11:30, will have lunch with Mr. M. and they will talk together for that hour on Tuesdays and Wednesdays when I don't work with R. R. also mentioned to me this new plan and feels quite good about it.
>
> We did some brainstorming together about R.'s working with other children. Mr. M. came to the conclusion that perhaps R. can work only with children whom he doesn't feel are more capable than he, because in different situations he chooses different children to work with. He is going to test that out.
>
> We talked about R.'s leaving at 11 making it impossible for him to have free play outside with the children in

his class.

> I feel really good about him, because he is trying, being fair, and realizes that R. needs success. I think he also tries to be consistent. At the end of our talk he said, "maybe together we can do something."
>
> As I was leaving the school, I stopped in to see the principal. I invited him to attend some of our chats together. He was a bit panicked thinking that I would be dropping R. at the end of the semester. I assured him I wouldn't. He said as I left, "We're glad you're here." [10]

Teachers also need similar skills with parents--to enlist their help in the advocacy of their child. Parents can be educated to their rights and the right to education of their child. Most parents, particularly low-income families, feel uncomfortable with schools and teachers, and often it is the teacher who must initiate involvement in school. The teacher of the special class of EMR children (whose classroom is described in a later section of this paper) started a parents' group that met monthly for social and educational activities (school psychologist spoke, etc.); this group was very supportive of the teacher in her attempts to get the best for the children (to the point of calling the principal to ask why the class couldn't get more materials, and why the principal was harrassing this teacher). The teacher also had a parents' visitation week when she helped both mothers and fathers arrange a day's visit to the class.

Parents, especially parents of children with special needs, often feel lonely, angry, and upset about themselves and their child, and they have no norms for how others feel with their children. Someone talking with them sympathetically can be very important. A young teacher describes a conversation she had with parents of a previously suicidal 13-year-old girl, with whom she was very close:

> I sat and talked with the K.'s for hours--first they told me J.'s history, saying "we are dealing with a

very disturbed child here" and "she just might try something while with you" and "we just wanted to make you aware of the responsibility you've taken on." I found myself defensive at first, but I tried to be open and honest . . . They told me of their relationship with J. and I talked of mine. They are very, very concerned and worried--yet they hold back . . . I could see in them that they were themselves really scared, and I let them know I understood that, that I saw they loved her, but I also know it would be hard for her to see and I told them that. I told them some of the things J. had told me. . . I told them some things about me, such as my not getting along with my parents and hating my mother . . . and I talked about how I've come a long way in explaining my feelings towards her and understanding her, so I can see her point, but really feel for me (and J.) . . . Anyway, when we were done, I felt so relieved and happy that we had talked. I felt sad to think that people like the K.'s can't show their affection for their daughter and remain . . . aloof, poised, behind little glass walls. I feel so much of that from my parents. [11]

The previous pages are an attempt to describe a training model for the teacher as an advocate for children with special needs. This kind of advocacy involves dealing with children's needs both in and outside the classroom.

In the following section, we utilize the example of one morning in one classroom to show how a more open approach within the school can allow a teacher to respond effectively to children with a wide range of needs. The materials on open education have mushroomed in the past few years; these include references on British infant school approaches, open classrooms, and free schools. Due to space limitations in this chapter, we are unable to describe training practices for openness,[12] but we will attempt to convey how we see openness as an aid to integration of special children and a correlate of the teacher as advocate.

One Example of an Open Classroom with Educable Retarded

A graduate of our preparation program taught a group of 15 primary level children labeled "educable retarded" in a public program. These

children exhibited a wide range of difficulties--physical (speech, hearing), learning, and emotional. As part of her program the children were each assigned to a homeroom and reported to it first in the morning. As a beginning way to make a child feel part of the school this can be useful. Once with this teacher, a number of the children spent various amounts of time in other rooms for different activities.

The following is a description of the activities engaged in by this teacher and the children during one morning. Embedded within this "typical" morning are a number of characteristics we have come to associate with open education. These will be discussed following this description of the morning.

> The room is large and bright, divided into areas by movable partitions. There is a wide range of materials around the room: maybe 50 Easy-to-Read books, a lot of magazines, records, manipulative things (blocks, puzzles, Lincoln Logs, some toys), art supplies, film strips and machine, tape recorder, games, puppet stage, etc. There were teacher-made materials (mostly phonics and math) and a lot of child posters and books and art products on the walls. In general, the content represented a wide range of approaches--from basal series and dittos to children's paperbacks and games. The "rules" on the wall were the following:
>
> No shouting; no running.
> Pick up after playing.
> Stay out of other's desks.
> Remember we all have feelings.
>
> 8:30 Children come in. Teacher asks them to go to homerooms. One child stays. Other children say, "It isn't fair." Teacher says, "Do you know why she stays? Because she gets afraid of other children. You have friends in your homeroom." Child, "She doesn't have friends?" "No." Children leave.
>
> 8:40 Children come back in. They find their desks. The teacher says they will rearrange them when all the children are here. Teacher, "You can have free time." Child says, "No, let's do work now." This child has a cleft palate and is

hard to understand. Teacher says, "It helps if you show me when I can't understand." He says, "OK" and shows her. Other children also tell her what he's saying.

Child takes turn selecting and putting day's words on board: house, people, ape, clothes, ABC's, colors, dwarf, bear. Children all doing different things--blocks, copying words, lots of talking--most of them.

One child crying. Teacher says, "What's the matter?" Child next to the crying child echoes, "What's the matter?" Another child says, "He's always crying. He gets mad when . . ."

A. asks teacher about meeting with her mother. Teacher says her mother said A. could dress herself now.

8:50 Teacher meets at small table behind screen with two children. Three others come over. A high school student comes in. Child says to me (observer), "Meet her. She helps me with my work." She (high school student) sits and works with the child. Children work; they are copying words from the board, reading, or playing games. Teacher works alone with a child doing math. Teacher talks with children about physical hurts, wipes noses, etc.; they come over to her while she is "tutoring."

9:00 Another child comes in. She begins looking at a book and reading.

9:10 Two children leave to go to another room.

9:12 Another child comes in. Teacher talks with four children regarding schedule--who goes where, when. High school student playing math card game with G. Teacher says, "G. is going to finish this game and then he's going to do some work for me. Right, G.?" Two other children doing writing lesson and math papers--a lot of talking and walking. Teacher gets out a record; several children ask her whose it is. She says, "It's mine. I thought it was my turn to bring one in." One child asks if it is the teacher's record or her husband's. She says it belongs to them both. She had written words to song on big paper. One child turns pages. Three children stand in front and sing "Moonshadow." Obviously, had done this before. A. and G. sing, A. dances. "Play it again." She does.

9:20 Several children focus on the clock, checking when to go to other rooms. Teacher sits with the high school student, G. working on math; she holds G. on her lap. Child asks, "When are we going to play the game?" Teacher, "About five minutes."

9:25 Teacher sets up game (all children sitting with her except J. who is looking at a book and says no when the teacher goes over to invite him).

Teacher: "It's a guessing game." (She had put a number of items in a cloth bag). "Why can't you tell what's in the bag? . . . What's another way you could find out what's there without seeing it?"

Children seem very involved and take turns feeling objects in the bag. Teacher asks J. again if he wants to play.

9:33 Two children leave. Teacher says, "Bye, see you later" and continues game with others--"Look at what is there. Try to remember which ones I removed."

9:40 Teacher comes to talk to me (observer). Children finish game and come over. Teacher asks some children to finish their work. Child helps put away blocks without being asked. Teacher says to A., "Maybe you could help, too." G. tries to use J.'s mirror; J. takes it back. Teacher says to G., "You can use mine. That's J.'s and she doesn't want you to use it." G. leaves and forgets it; he asks me to brush his hair. A. asks teacher to play cards. Two children playing ball; D. playing cards with A.; J. reading; B. playing math matching game that teacher made; two children doing puzzles alone.

Teacher says, "D., Miss ___ doesn't like to see balls in the school building. We'll both get into trouble. How about getting out the bowling pins?" He just says, "Aw" and plays with small ball. Teacher says, "OK, put the ball in your locker, D."

A. brought in Richard Scarry's Best Storybooks. New high school student comes in. Teacher gets children together, reads story. Children still active. Teacher walks, reading. Asks T. not to bang. (Two children have hiding places in cabinets covered by posters--they are in and out of hiding place.) Teacher involves G., who is hiding and making noise, by asking him to roar for the lion in the book. She says, "G. has the best roar!" After that, G. comes out and sits so he can see book.

A. says, "I wish you wouldn't read any more." Teacher says, "You don't like me to read your book."

Teacher announces, "Five more minutes and we'll have a snack."

G. comes over and imitates the teacher, asking me (observer) to play "What's in the Bag?"
Two children ask the teacher to read them a book about baseball. She sits with them and reads.

10:00 Snack. Some children have brought their own and teacher has graham crackers for others.

Recess. Teacher says children can go out but don't have to. Most children decide to stay inside with the high school student. The teacher and I get a cup of tea and come back to the room; the children stand or sit near us, talking.

10:15 School bell. Teacher gets small group together to do the Talking Alphabet; she puts the record on and the three children sit with the high school student and do it.

Teacher then gets three girls and plays a phonics game with them (she had made the game).

Teacher, "D., either you sit with us or go back to what you were doing and not interrupt."

10:34 Teacher goes to the board and shows six children how to play tic-tack-toe by playing it with B. "Do you understand? No? Let's try it again." Several children then play together at the board.

D. asks again about moving the desks; wants it "like the beginning of the year." Teacher says, "Let's make a map of how it was then." She gets a large sheet of paper.

S. asks teacher for time with N., the second high school student. The teacher says, "A. has special time with her, but maybe A. could share? "A. "No!" Teacher, "It's hard to share someone you like so much."

10:45 N., high school student, arrives. Teacher says, "N., we have a problem," regarding A.'s concern. Somehow this was resolved and N. made puppets with three girls. Teacher to A., "when we do things together, we can't always have them just the way we want them."

10:50 Children positioning their desk preferences on map of the room.

11:00 Teacher asks children to clean up and get ready to see Electric Company on TV. (Three children are making puppets, J. playing with magnets.) Two children are

pretending to fight. Teacher, "G. and J., that doesn't look very good. Stop." Two children leave to help the gym teacher.

11:08 J. watching Family Affair (TV). Four children making puppets. One child playing with blocks. I (observer) talk to two boys. Teacher does a puzzle with G.

11:20 M. going to Maine. Teacher gets maps for him. J. wants to put thread around room. Teacher says, "You know why you can't do that, because it is so thin that someone could run into it and not see and hurt themselves." We talk a little. Teacher says to some children, "I'll put these dittos out after lunch and you can take what you want." J., "Can I take one now?" "Of course." Teacher sees G. reading a book and goes over and talks with him about it.

11:30 Lunch. First children go. B. calls lunch roll. G. brought in news clipping. Teacher reads it to him. Then we go to lunch. (Teacher has half-hour).

Teacher Comments:

In response to questions, the teacher of this classroom said:

> I would describe the children's behavior as approximating normal children except that they are immature, developmentally behind others of their chronological age . . . My general goal for the classroom was to prove that these children are just as capable as other children in terms of day-to-day functioning. I felt the children were expected not to do much of anything and they would welcome the chance to be <u>like</u> others . . . I felt the children needed to have as much to say about their class as I did and other people did.

Observer Comments:

I felt that there was a great deal of room for children to initiate activities for themselves and with others (including the teacher). A number of the children asked the teacher (and high school students) to do specific things with them (read, play card game, etc.), 90 percent of the time was open for children to make choices about what they wanted to do. Often, the teacher made a suggestion or initiated some kind of content, but the children could take it or leave it. Children initiated much of the content of the day--for individuals and to a lesser extent for the group (map of room).

There is a kind of teacher-established routine, although it didn't seem arbitrary; everything flowed. If the teacher

hadn't shown me the schedule, I don't know that I would have thought of it as a schedule.

The group experiences were more teacher-directed, although in all cases the children were very active (What's in the Bag, Show and Tell). Children talked much more than the teacher did. She initiated one-to-one things with kids, often around skills. Children seemed to enjoy it.

I saw no negative/overtly resistive interactions regarding content. If they didn't want to participate, teacher left them alone, although she did extend invitation three times.

The children seemed to respond favorably to routine, were eager to "work" this morning. While the room and its contents reflected a concern with skills, the feeling was certainly not one of something being forced down the children's throats. They seemed to see the skill things (the easier things anyway) as play.

Feelings were mentioned a lot by both children and teacher. One rule on wall stated: "We've all got feelings!" Teacher seemed to convey an attitude of acceptance. I can't remember her using the terms "good-bad." She recognized children a lot, tried to include everybody, said goodbye and hello as each child came and went in the room. She just didn't seem judgmental to me.

A lot of transitions with children in and out, and they seemed to handle it well. Teacher gave a lot of time notices, warnings: "in five minutes we'll do this; in five minutes G. has to go to gym." I felt good there. Children seemed happy. The room was noisy, busy and active. Children seemed to feel good about each other and about the teacher.

The above excerpt highlights a variety of teacher behaviors that aid children with special needs, and which are often seen in open classrooms. For example, a set of these behaviors has to do with the nature of the interpersonal contacts between teacher and child. This particular teacher tended to ask children questions, not of a rhetorical nature, but having to do with information-seeking and fostering inquiry.

Example: In the incident in which the teacher allows one child to remain in her room while she asks others to check into their homerooms, some children objected to one child staying. She responded by asking, "Do you know why she stays?" And then she offered an explanation.

It is of interest to note that her explanation is not of a bureaucratic nature, but deals frankly with the child's feelings, helping the others to emphathize with this one child. The development of a classroom climate which fosters caring of one child for another and facilitates empathic reactions is a vital focus and has great implications for those teachers and children involved in mainstreaming activities. It is of importance, because in regular classrooms we are frequently dealing with attitudes and concerns that children (and teachers) may have about each other. Frankness, openness, and more importantly a process for responding to these concerns is necessary. For this teacher, the process is spending a good portion of her time talking with children.

Her conversations with the children had many purposes. For example, she would help children define the use of their time (talking with four children regarding their schedule); or asking for clarification so she can understand them ("It helps if you show me when I can't understand"); or encouraging children to assist each other ("Maybe you could help").

A second category of her responses has to do with the interaction of the child, teacher, and curriculum materials. For example, late in the morning she made contact with one child, who was going to Maine with his family. She located some maps for him. A reading of the morning activities points up the great range of interpersonal, as well as curriculum, encounters between teacher and child.

A third aspect has to do with the use of human resources in the classroom. This teacher and many others involved in open education value the utilization of other children in the classroom as helpers of their peers. This notion of children helping other children has great potential value in integrated classrooms.

Those educators adhering to an open education approach for responding to the needs of children with special needs tend to believe in the potential for growth residing within each child. We are attempting to challenge a lot of assumptions about the needs of handicapped children and the conditions most facilitative for their learning.

The following table highlights several of the arguments for mainstreaming of handicapped children and the open education response.

TABLE 1

Arguments for Mainstreaming	Open Education Response
Greater opportunity for diagnostic teaching	Child is involved in a variety of interpersonal and academic encounters; this means a wide range of diagnostic opportunities as well as interventions
Availability of more appropriate role models	Extensive contact with other children; children helping other children
Opportunity for focusing on affective and cognitive development	Belief in responding equally to the feelings and learning needs of children
Development of skills in group living and learning	Emphasis on group development, and the fostering of a learning community
Elimination of destructive effects of labeling on self-concept	All children seen as having idiosyncratic needs and learning according to own interests and pace

What Teachers Can Do Towards Mainstreaming Children with Special Needs

Drawing on the experiences of teachers with whom we have worked, we would like to describe some ways regular class teachers and special class teachers can advocate for children with special needs, both in and outside of their classrooms and can thereby involve these children more in the

mainstream of education.

Regular class teachers can have children with special needs in their class, and there are many things a teacher can do to make this easier:

Individualized instruction and open education approaches, where children can work at their own pace on various levels. This means the provisioning of a rich environment (often with free materials), so that a range of styles (concrete and abstract, auditory versus visual) can be accommodated and the children's choice of activities can be seen as diagnostic.

Group activities in which all children can participate.

Provide many human resources in the classroom from parents, high school students, college students, volunteers from the local volunteer center, to allow more individual attention to children; this may include teaching children to teach other children.

Teach values and helping skills as part of the curriculum to help children care about each other and respond to others in need.

Be a diagnostician in terms of consciously problem-solving about ways to prevent children's needs from being disruptive to the group and, also, about ways to meet those needs. Often, diagnostic work means assessing physical bases for learning or behavioral problems, as well as looking at the contribution of the particular situation (classroom, teacher) to that problem. A teacher may need to be attuned to the symptoms of vision and hearing difficulties, perceptual development, the nuances of low self-concept and low motivation, group dynamics, authority issues, etc., as well as traditional methods of teaching phonics or math skills. In open settings, what the child chooses to do with the materials he interacts with are seen as diagnostic of his needs and skills.

Be flexible and be a problem-solver. Working with any group of children, but especially a group with a wide range of skills and interests, means that a teacher cannot expect to find a single process that solves all problems. Expect that through the year much will change and all a teacher can do is to try various procedures to deal with issues as they come up. A teacher of disturbed children describes the process focus:

> Well, I never really looked for a consistency too much in what happened between myself and the kids. I guess it goes back again to the relationships I thought I had with them. I thought we really had strong relationships and that if there was a consistency, it was a consistency of maybe sometimes not being consistent. Does that make sense? That the kids really knew me and I really knew them, and we learned together that there was no right way

that would always work in different situations. For example, just the physical environment of our classroom was constantly changing, the learning needs of the kids were constantly changing. My teaching needs were constantly changing--and that was OK.

Seek support and help when you feel the need from other teachers and services in the school. Often, the "closed door" syndrome in schools is perpetuated because no one initiates interaction. Many teachers are lonely and unsure of themselves, but are afraid to show it, thereby losing the chance to make contact with others who feel the same. (See Knoblock and Goldstein, The Lonely Teacher.)

Give support and help to others. Offer it; many times a teacher just needs a sympathetic ear--and some day she may do the same for you. Attempt to work with other teachers--responding to their children, planning joint activities, etc. An example: in one school the male "Social Studies" teacher took over the reading instruction of a hyperactive boy with perceptual difficulties. The boy seemed particularly drawn to the man and was not responding well to his female reading teacher; the reading teacher prepared many of the materials and "lessons" and the social studies teacher carried them out.

Maintain communication with parents. Visits to parents and encouragement of parents to come into the classroom can strengthen the understanding between home and school--so both teacher and parent can advocate for the child. For example, a resource teacher visited the home of a six-year-old child, whose regular teacher had requested his exclusion. In talking with the parents, she discovered that the child had been on phenobarbital since he was 18-months-old, without ever having been reevaluated. She arranged with the mother for a doctor's visit and succeeded in postponing the suspension hearing until the results of the exam were in. The doctor reported that the drug could have been a factor in the boy's disruptive behavior, and they are now gradually withdrawing him from his dosage. Apparently, his behavior in the classroom is "improving."

Special Class Teachers

Many of the suggestions above are applicable to special class teachers as well. In addition, we encourage special class teachers to integrate their children as much as possible into "regular" situations. This may initially involve only socializing activities--parties, films, etc., which the special class teacher may have to initiate. Special class children can also share homeroom, gym, lunch, art, shop, music, and

playground activities with regular classes. Teachers may need help with children who need skills for these settings. One teacher described using M&M's to teach a child diagnosed as autistic to shoot baskets on the playground; previously, he had stayed by himself in the corner, never interacting with others, but as he learned to enjoy playing basketball, more children would interact with him and he had an activity to join in. In one junior high, the one EMR class had high prestige, because they had won all the intramural sports tournaments with the "regular" 7th grade classes; these youths felt proud of themselves as a group.

Children can also be integrated into regular classes for academic content as it is appropriate. Many special class teachers send their children to other classrooms to be part of reading groups or math classes at their level. The children feel better about themselves and can be on their way to being integrated full-time into regular classes. Often, other teachers are willing to respond to the needs of children, especially if a trade-off of services is made. For example, one teacher of a primary class of "disturbed" children, whose specialty was language arts instruction, taught a daily reading group for the first grade teacher across the hall, who, in return, took some of the children from the special class part-time; this served to "normalize" the special education classroom for part of the morning and, also, partially integrated the children in "regular" classes. In an elementary school where Friday afternoons were devoted to "mini-courses," a teacher of a primary EMR class (our case study in this chapter) chose to teach courses (cooking, candle-making) in which some of her children could participate with the children from regular classrooms.

In addition to trading services, a special class teacher is often

in a position to help other teachers deal with children with learning and behavior problems--if she feels good enough about herself to do so![13]

Resource Teachers and Crisis Intervention Teachers are two newer roles which can be of great value in mainstreaming children. These roles can be defined as child-advocates and advocate/helpers for teachers as well. Many of the behaviors mentioned above are applicable to these roles.

The eventual goal of these attempts by special class teachers is, of course, to fully integrate children, so that there are no longer special classes and segregation of children with special needs. This focus on helping children function in different settings and helping teachers widen the range of behavior with which they feel comfortable dealing is, in fact, the advocacy role of a teacher. We feel particularly strongly that special class teachers should exert a great effort towards changing the future of the children in their class--doing whatever is possible to unlabel them and get them into the mainstream of education. Teachers have the opportunity to be influential in case conferences and school legal hearings, as well as in other aspects of a child's life.

Summary

This paper has discussed the mainstreaming of children with special needs via the utilization of open education approaches within the classroom. In addition, we have defined a training process to enhance the ability of teachers to become advocates for their children, within the classroom, the school, and the community.

FOOTNOTES

1. "Preparing Psychoeducators for Inner City Teaching," BEH Contract #OEG-0-71-3676 (6Q3), see Project Reports 1971-72, 1972-73 by Knoblock, Barnes, and Eyman; 1973-74 (in progress) by Knoblock, Barnes, Apter, and Taylor.

2. Ullman and Krasner, A Psychological Approach to Abnormal Behavior. Englewood Cliffs, N.J.: Prentice-Hall, Inc. 1969, p. 21.

3. Taped Interview, Martin Henley, February 1973.

4. See Simon et al., Values Clarification and Raths et al., Values in Teaching.

5. See The Metaphor Test in Davitz, The Communication of Emotional Meaning by Metaphor, p. 169-171. Also, see chapters in Greer and Rubenstein, Will the Real Teacher Please Stand Up? and exercises from Pfeifer and Jones, A Handbook of Structured Experiences for Human Relations Training.

6. An excellent discussion of the issues involved in the exclusion process is The Way We Go to School, The Exclusion of Children in Boston, A Report by the Task Force on Children Out of School, Beacon Press, Boston. The Council for Children with Behavioral Disorders (a division of CEC) has also published a small monograph on school exclusion.

7. Examples of these kinds of organizations are the Youth Law Center (located in San Francisco), whose staff is among other things using legal means to change institutions for delinquents in some states, and the Center on Human Policy (Syracuse University), staffed by lawyers and others who contact parents of special children and aid them in getting the state-guaranteed education for their children, including institutionalized children and deaf and otherwise disabled children. The ACLU in New York State has also published a booklet entitled Students' Rights in New York State Public Schools, which states rights a child has for schooling and the due process allowed him.

8. The NTL Institute for Applied Behavioral Science, 1201 16th St., N.W., Washington, D.C. 20036, has produced many ideas for the active learning of interpersonal skills. Exercises can also be derived from the volumes of the Handbook of Structured Experiences for Human Relations Training (Vol. I, II, III) by Pfeiffer and Jones.

9. "Teacher Perspective On Changes to an Open Approach" by Amarel, Bussis, Chittenden, Educational Testing Service. Presented at American Educational Research Association, New Orleans, March 1, 1973.

10. Diary, Trainee, "Preparing Psycho-educators for Inner City Teaching."

11. Diary, Teacher at an "integrated" alternative school.

12. The reader can seek out the following discussions as examples of different training models (preservice, inservice) for more open teaching:

Bussis and Chittenden, Analysis of an Approach to Open Education. Princeton, N.J.: Educational Testing Service, 1970. (Analysis of EDC Advisory approach.)

Dorn and Weber, "The Summer Institute As A Workshop Prototype," in Notes From the Workshop Center for Open Education. October 1972, 6 Shepard Hall, City College, Convent Ave. and 140th St., N.Y., N.Y., 10031.

Greer and Rubinstein, Will the Real Teacher Please Stand Up? A Primer in Humanistic Education. Pacific Palisades, California: Goodyear Publishing Co., Inc., 1970. (The book itself is a training source.)

Knoblock, Barnes, and Eyman, Preparing Psycho-educators for Inner City Teaching. Syracuse University. Final Report for USOE, Bureau of Education for the Handicapped, 1972. (In press, 1973)

Lyon, H.C., Learning to Feel--Feeling to Learn. Columbus, Ohio: Charles Merrill, 1971. (Especially Chapters 3 and 6.)

Marshall, S., Adventure in Creative Education. London: Pergamon Press, Ltd., 1968. (12-week workshop with primary teachers--"to know what it feels like to be a child.")

Perspectives on The Prospect School. The Prospect School, N. Bennington, Vt., February 1973. (Description of teacher-training and administrative training program for Antioch Graduate School.)

Rogers, C., Freedom to Learn. Columbus, Ohio: Charles Merrill, 1969. (Many chapters are applicable, but particularly Chapters 8, 9, and 15.)

Rosenblum, M., The Open Teacher. U.S. Office of Education, Report on Contract #OEC-1-7-062805-3963.

Thackray, Chaudhry, and Grine, Open Door. New York, N.Y.: Center for Urban Education, 105 Madison Ave., 1971. (Cites other references to The Open Door project.)

U.S. Dept. of Health, Education and Welfare, Model Programs, Philadelphia Teacher Center. U.S. Government Printing Office, Catalog #HE5-220:20163.

Yeomans, E., The Wellsprings of Teaching. Boston: National Association of Independent Schools, 1969.

13. Concerns that prevent teachers from reaching out to others are described in Knoblock and Goldstein, The Lonely Teacher.

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ADVOCACY PROGRAMS

Child advocacy programs take as many forms as the varieties of schools in which they occur. The four examples presented here range across the country - California, Washington, North Carolina, and Colorado - and describe programs ranging in size from several hundred adults and several thousand children in North Carolina, to three teachers and 100 children in Yuba City, California. The philosophical base of these programs is the belief that the quality of the learning that takes place in a school is determined by the quality of the interactions between all the people who spend their time in that school.

Informal, child-centered classrooms at kindergarten and primary levels can fulfill the purposes of special education even before formal psychological diagnoses about the nature of the handicap and prescriptions for treatment are made. The classroom teacher's customary attentiveness to the differences among all children tends to spotlight learning problems and emotional disturbances very early in the child's schooling, and corrective action frequently can be taken earlier than would be possible in traditional settings. The Kindergarten/Early Childhood Education program in North Carolina capitalizes on this advantage of the informal classroom, and considers mainstreaming of handicapped children integral to its whole approach. The program's first priority is retraining teachers to perceive themselves and their students in new ways - all of them learners who will benefit from an exchange of ideas and support - all of them unique individuals whose needs are special and valid. Their emphasis is on personalized instruction and acceptance of individual differences by a teacher who works as a facilitator and organizes the classroom environment around resource centers. Multi-age grouping, parent participation, and racially integrated classrooms are other emphases.

At Steamboat Springs, Colorado, the discovery of the individual child's learning strategies, and a team effort directed at reinforcing these strengths, are the focal points of the Child Study Center's approach to advocacy. An itinerant team and a school-based specialist offer expertise to aid the classroom teacher in maintaining the exceptional child in the classroom. It is assumed that all children can find a level at which they can succeed, and it is the job of the adults in the school to establish environments for the child to experience successful learning. A Learning Analysis Plan details the specific objectives for each child's educational growth, and periodic evaluations of the child's progress are made. The role delineations of the itinerant team are clear, but the objective is to provide the classroom teacher with whatever is necessary to mainstream the handicapped child. Thus a combination of skills operate in concert for the ultimate benefit of the child.

The mainstreaming program for the middle grades (4-6) at the Bridge Elementary School in Yuba City, California, is no longer operative as a result of a decrease in the number of handicapped children in the district. Ironically, the successful mainstreaming of 14 students from Bridge Street to the junior high school in 1973 resulted in the closing of the program, since not enough middle-grade educable retarded students were left in the district to fill up the two self-contained classrooms for special students that the district maintains in another school, and still continue the project at Bridge Street. While in existence, the project exemplified how much successful innovation a completely teacher-generated program can accomplish.

The Bridge Street teachers began mainstreaming when they decided that the isolation of exceptional children reinforced those childrens' negative behavior and did not allow for the modeling environment necessary for social and academic growth. They integrated 18 EMR children with three classes of nonhandicapped children. Their focus was on the improvement of self-concept, individualized instruction, and increased acceptance of differences among all children. The teachers managed their

classrooms so that the children were largely self-directed. With practically no money to speak of, but almost limitless energy, flexibility, and commitment to change, the Bridge Street teachers put a mainstreaming program together, which worked so successfully, that it is hoped their experience will be translatable to other situations, and is presented herein for that reason.

The Franklin Pierce School District mainstreaming project in Tacoma, Washington, while not closing, is currently undergoing a major change of emphasis, even though no one connected with the program has expressed dissatisfaction with its achievements. The original model was preventive as well as remedial; no labels were applied to any children and, consequently, all children were eligible for special services as the need arose. However, recently revised state regulations will no longer allow money earmarked for handicapped children to be spent on any but those who have been so labeled and identified. Additionally, recent demands from the state for more precise evaluation data have caused the district administrations to recommend the use of techniques that will provide more quantifiable data. It is noteworthy that this program, like Yuba City's, although successful in terms of accomplishing its objectives, must change some of its methods to comply with district and state-wide directives.

Inclusion of all children with respect for their unique learning styles and abilities is the message in an early childhood program aimed at reinforcing young childrens' natural motivation to learn. In 1969 a state-supported kindergarten program was initiated that aimed at providing child-centered, integrated-day classrooms for children in kindergarten through third grade. Patterned after the British infant schools approach, the educational leaders at the North Carolina State Department of Public Instruction engaged a number of consultants from Britain to aid in the development of a primary program that enables teachers to experience themselves as learners, and children to develop the skills, attitudes and knowledge to become life-long learners. Summer institutes each year develop new skills and confidence in teachers, principals, and supervisors, and provide essential follow-up expertise for new classes opening each year.

KINDERGARTEN-EARLY CHILDHOOD EDUCATION: NORTH CAROLINA OPENS CLASSROOMS*

"When children are grouped homogeneously, they compete with one another; when grouped heterogeneously, they reach out for help from one another," according to Ron Ausdenmoore, consultant in the Division for Exceptional Children at the North Carolina Department of Public Instruction. He believes that the regular classroom must be changed so that educators can advocate for differences rather than for homogeneity. "Learning must be reconfigured so that everyone in the classroom shares responsibility for his own learning and the teacher sees himself as a learner, above all else."

The Kindergarten-Early Childhood Education (K-ECE) movement in North Carolina is infused with the ideologies and practices of the British infant school approach to education, which attempts to promote the natural, total development of each child. It assumes a number of important concepts: children naturally develop at different rates of growth; they have an innate and driving motivation to learn; and they learn best from environments that permit free use of a variety of materials and experiences directly connected to their own lives. These assumptions have led to the "integrated-day" approach to education wherein a

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teacher trained in understanding and managing a child's physical, mental, and emotional growth facilitates a natural, nurturing, and stimulating learning environment.

> The question is not, "why open education?" continues Ausdenmoore, but what structure do you have to create in the classroom so that all children can learn? Everybody is a learner and everybody's role has accountability built in--by making choices and being responsible for what he learns. The adults are responsible for bringing new resources into the situation so that learning continues. They become advocates between the child and the school system, asking for those materials and resources that will give children appropriate learning choices. The teacher observes the children and uses these observations for specific plans and activities to move the child's learning forward. Kids learn best by modeling one another, and they learn best if they have fed back to them the data they've already learned. Traditional classrooms are set up to yield the data to the adult, rather than to the child. The climate in the classroom must be changed to one of collaboration between the teacher and the children, which will lead them to seek help from one another.

The spirit of shared learning is another belief that is manifested by early childhood educators in this state. Una Mae Lemmon, state consultant to the K-ECE program, believes the most important aspect of open education is how much of the philosophy is internalized by teachers and principals, and the key to that depends upon the caliber of the teacher training:

> We go about it all wrong when we give them a whole bag of curriculum goodies; it needs to begin further back. Once you can come to terms with yourself and accept yourself--when you can be open and honest and like yourself--then, and only then, can you teach school. There must be mutual respect and caring built into the school climate before you can implement this philosophy.

Preparing teachers to trust children to make their own decisions and to be responsible for their own learning, and to become themselves more open to their students and fellow teachers, is a very complex process. Learning how to use the direct interest and experiences of a child to form the base for his/her work is a long-term process for both teacher and child. It is not easy to recognize and communicate the concept that any one learning experience is interconnected with several learning skills; that examining an ordinary rock can be the basis for acquiring skills in math (weighing and measuring), reading (researching), writing

(describing), art (drawing and painting), or science (analyzing its properties), Children don't see themselves learning in separate subjects, but teachers educated in a traditional manner often are not prepared to impart information except in sharply defined, discrete "packages." They have not been taught an integrated mode of teaching, nor have they experienced this method of learning themselves. Since people tend to model behavior on what is familiar, teachers tend to teach in the same ways that they were taught, even though they may be dissatisfied with and dislike those ways. So retraining teachers to perceive children in new ways requires that they must learn new perceptions of themselves as learners; that any situation can be a learning experience; that there is not just one way to learn or to do something; that the free use of a variety of materials can produce new learning; and that children do not have to repeat the same tasks the same way, every day for learning to take place.

Once teachers have experienced themselves as learners again, and have learned how to provide a classroom environment where all styles of learning are equally valued, then mainstreaming special education children into open education classes follows in a very logical fashion. For open educators begin with the belief that all children are capable of learning, since learning grows naturally out of every child's life and experience. And if the teacher is trained and prepared to teach to every child's unique learning strategy, rather than teaching to the whole class, then the idea of accommodating exceptional children in the classroom is entirely feasible.

In order for teachers to be able to make these changes in their teaching methods, they first have to change their behavior and attitudes. The North Carolina program concentrates on providing teachers with the kind of training that will allow them to reexperience themselves in new ways.

Program Emphasis

In 1968, North Carolina was one of three states in the country that did not

have state-supported kindergartens. By 1969, the first eight kindergarten centers had been established through state law and accompanying state funding. There are eight educational districts in the state, and two kindergarten demonstration classes were placed in each district in 1969. By 1972-73, the classes had expanded to approximately 150, and by 1974 there will be 685 classes as a result of a large increase in the 1973 state appropriation to the program.

Two kindergarten classes compose one center of 46 children, two teachers, two aides, and two separate classrooms, if the building is self-contained, or a large open space, if the architecture of the building will permit it. Because the staff of the new kindergartens share materials and ideas with first, second, and third-grade teachers, the centers are not exclusively kindergarten programs; they include the entire primary unit. This encourages multi-age grouping, a goal of the K-ECE program. Some kindergarten centers still are composed mainly of five-year-olds, but many now reflect the multi-age emphasis and include children from ages five through eight.

The K-ECE has several stated goals:[1]

individualized learning: based on the child's developmental level, interests, and needs;

informal child-centered programs where the child is the center of attention and the teacher is a facilitator or guide;

environment organized around learning interest centers: structured to provide for directed activities, choices, and decision-making;

multi-age grouping: where children ages 5-8 can learn and work together;

parent participation through the establishment of advisory council and volunteer groups;

including mildly handicapped children in the mainstream of education.

James Barden, Title VI-B consultant and section coordinator of federal programs for handicapped children, says:

> The important prerequisities in mainstreaming programs are to teach regular teachers to take responsibility for all children, and to teach special education teachers how to respond in new ways, no longer in isolation from the rest of the staff and children. You need the kind of inservice that puts

teachers in the learner's role and teaches special educators how to be human resources to a team of teachers, rather than specialists in their own classrooms.

Open Education in Action

One special education teacher turned resource person is Linda Coln, staff member of the West Rockingham Elementary School in Rockingham, North Carolina. The school opened in 1971 with a K-6 population and an open-space building. The philosophy of this school, stated in a brochure, is:

> We believe that open education is a direction. It's a movement towards another way of looking at children and their learning--a gradual blending of old ideas and new approaches. We believe that each child is unique and needs different experiences to reach his maximum growth potential. We accept the child as he is (at his stage of development) and go from there--not comparing him with others but only with himself and his growth.

Ms. Coln adds her own belief to this: "We've got to be able to offer children experiences that open up their minds enough so that they want to learn."

Ms. Coln works in a small, semi-enclosed space adjacent to one of the open learning areas. Children come to her who want or need special attention. She feels there is no stigma attached to their leaving the larger area to work with her, because she has worked with the children in their home areas long enough for them to consider her another member of the teaching team. Additionally, the children who work with her are not exclusively "exceptional" children; often a child will request to see Ms. Coln as a treat, or be offered a chance to spend time with her as a reward for having done particularly well in some work. Ms. Coln observes that whenever the curriculum is individualized, children working with a resource person are not stigmatized, since all the children are working at different tasks. Furthermore, she believes that the resource area is considered a reward situation by many of the children, because the setting stimulates learning in a supportive way She participated in the first state-sponsored summer training institute for educators opening K-ECE centers, and says that one of the most valuable experiences there was finding herself in the learner's role."You've got to believe in what you're doing and to have some experience in doing it or it's not going to be any go ."

At Elkin Elementary School in Elkin, North Carolina, a Title VI-B program provides a good example of an interface between an integrated-day classroom, multi-age students, and inclusion of handicapped children in mainstream education. Although not one of the K-ECE sites, the Elkin project, now in its third year, was initiated to develop an educational setting to meet the needs of Elkin's exceptional children. Ms. Carrie Kirkman, project director, articulates the relationship between open education philosophy and mainstreaming:

> Our major focus was to provide teachers with alternative techniques to restructure a classroom, so that the education offered would be adapted to each child. We knew changes had to take place in the structure of the class, the arrangement, the curriculum, and the teachers' attitudes.

All incoming first graders to Elkin are assessed by the Draw A Man test, reading readiness, observation, home interviews, and physical exams. These assessments then form the base of an individualized learning program for each child. Most classrooms in this 1-4 school are arranged into learning centers, and all varieties of teaching take place. Teachers can choose to team, to have a multi-aged or homogeneous room, to combine two classrooms, or to maintain their self-contained rooms. Most inservice has been directed to the teachers of first, second, and third grades, and there is less team teaching and multi-aging in the fourth grade. Inservice for this program has consisted of yearly workshops run by K-ECE consultants, since the philospohy of the Elkin project is identical.

> The child is brought to realize that learning is not an activity which is circumscribed by the walls of a classroom, but continues in all activities in which he participates.[2]

The Learning Institute of North Carolina (LINC), a research foundation, provides inservice consultation and year-end evaluations of the project. W.H. Carpenter, Superintendent of the Elkin City System, explains a few things:

> You've got to sell your existing leadership on the change, and not bring in an outside person. Your teachers may be sold, but if the administration isn't, you're going to have problems. There's so many things that the administration can do to get in the way without doing anything. Our outside consultants (LINC - K-ECE) knew only one pattern--to bring in a change agent--

but unless the change agent and the principal have a good relationship, you better have the principal be the change agent.

One of our difficulties was that we were trying to bring something new into a community that was satisfied with what it had. We were trying to change the established way of doing things. A retreat that we held for board members, parents, P.T.A. leaders, and other citizens, before the project began, helped accomplish this. After we decided to change, the hardest part was to be sure that we didn't impose another program on top of ours, instead of letting our own ideas evolve, or to take new ideas and build from there. The best thing I did was to get out of the way after it started. My role is one of message-carrier; I listen, and bring back, and listen, and drop in to find out what's going on. With the tremendous amount of support we've had from the state department, and full endorsement from the local school board, we're in pretty good shape. In order to get the school board committed, we called on LINC and the state consultants to meet with them. We convinced the school board that we could do this with no additional cost to the local unit. Now I could guarantee half the costs if I had to.

It is almost inevitable that relationships within a school will change as the structure becomes less formalized. By allowing handicapped children to work with and alongside of nonhandicapped children, the Elkin school has caused a change in the way its teachers look at all children. With three years' experience in early childhood education, Elkin will receive its first public kindergarten in fall 1973, and is certain to become a significant demonstration site for both advocates of open education and mainstreaming.

As the philosophy of early childhood education has spread through the state, attitudes of openness to change and acceptance of innovation have followed. The most critical factors in bringing these changes about have been the summer training institutes and the eight coordinators, who were hired in June 1971.

James Jenkins, Director of the Kindergarten-Early Childhood Education program hopes to have one special education teacher attend from each school represented at the institutes. He says:

This is the weakest part of our program; it is the toughest thing to get teachers to accept special education children, and to get special education teachers to integrate our philosophy into their style of teaching.

Ms. Lemmon, the consultant assigned to ensure that exceptional children would be included among the kindergarten population, comments:

> We knew it would be a battle to include special education children, and we solicited children who had some sort of exceptionality. We made the mistake of not getting together with the special education teachers right away to explain this to them. A lot of our energies the first two years were spent in getting people at all levels to understand that special educators and regular educators would have to work together and share the children. We operated under the assumption that you could bring about inclusion of exceptional children by having large group meetings with teachers about the problem. Now I think it has to be on an eyeball-to-eyeball basis, which is impossible when we're talking about the whole state. But by working through special education supervisors, coordinators, and staff development people, we continue to emphasize the need to see that the special education teachers are not separated from the regular teachers during the summer institutes. All exposure has to be the same for all teachers.

Teacher Training Institutes

In 1970, the first summer institutes were held for staff development. There were two four-week sessions for all the educators in schools where kindergarten centers were planned. The time was spent in residence at a university site with consultants from England, the State Department of Education, and the universities. The Learning Center of North Carolina (LINC) provided the evaluation component to the program, as well as consultant services. The consultants were people experienced in open classrooms, team teaching, and new curricula. They led workshops, and small and large discussions in early childhood education theory, interwoven with practical experience in producing teacher-made materials, particularly in arts and crafts. There were also children attending classes from 8:30 a.m. through lunch every day the last two weeks, which permitted the participants a practicum experience in team teaching and open classrooms. After the practicum, they discussed what had gone on in the classroom with the consultants who had been observing during the practicum.

The 1971 summer institutes were similar, except that during the last two weeks of the summer, the participants returned to their home schools before the start of the new term to reorganize their classrooms in ways that would reflect what they had learned at the institute. Again, consultants were available to them for help with the physical reorganization of the classrooms, and to answer questions arising from the inevitable difficulties of trying out new ways of teaching.

The 1972 summer institute saw some changes in the program. Eight district coordinators had been hired and had visited England in the fall of 1971. Their study of the English infant and primary schools led them to change the length of the summer institute for the educators from four weeks to two weeks, and to add an institute just for principals--to enable them to understand the open classroom approach, and thereby be willing to provide the necessary support to their teachers. In the English infant and primary schools, their head teachers (the equivalent of American principals) function more as master teachers than administrators, since they generally preside over much smaller schools, and they are often relieved of many administrative duties by teachers acting as department heads. The heavy administrative duties of American principals leave very little time for close involvement in instruction. The principals' institute was designed to instruct principals in the theory and practice of open education goals and to enable them to be more empathetic with their teachers' problems in the new approach.

The six days of workshops, discussions, lectures, and feedback sessions for the 77 principals attending from all over the state were managed so that learning occurred in much the same way that it would in an open classroom. The principals were taken to a junkyard, or a mountain, and, in the words of Don Williams, British consultant to K-ECE says, "We got enough materials and experiences from those two sites to last all week."

However, Ms. Lemmon felt that one element missing in the principals' training was

> . . .lack of a structure that allowed the principals time to process and to discuss the learning that they had gone through, so that they could verbalize what had happened to them. There wasn't time built into the institute for this to happen, and this was a mistake. It's important in the inservice to manage the environment so that these things do happen.

Behind this comment is the belief, so often expressed by those involved in this program, that personal growth and self-awareness must occur before changes in the classroom can be expected.

The 1972 summer institute for teachers focused on putting the teacher in the students' role--so that they could feel what it's like not to know everything,

and not be allowed sometimes to learn in the style most comfortable to them. The effect of this role reversal was that teachers became more patient with children. According to one participant, the consultants "loosened all of us up and moved us away from rigid categorizing. There were lots of resources and we came away with materials and real knowhow about making things."

One of the unique difficulties in the subsequent institutes was providing learning experiences that benefitted both new participants and those returning for their second summer. The problem was solved by having the returnees work with the new people in the first week, sharing teacher-made materials and ideas. The second week was spent back at the home schools, rearranging the classrooms into learning centers and pulling together ideas and materials gathered from the institute. Teachers' insecurities may also be reflected in their reliance on textbooks, paper work, and elaborate materials. If the inservice training is successful, and if principals are supportive, the teachers will learn to produce many of their own materials, thereby fitting materials to the children they have, rather than the reverse.

The 1973 summer institute was planned to reflect the changing needs of the program. Increased funding from the state legislature expanded the program from 148 classes (fall 1972) to 680 classes by fall 1973. In 1973, by the summer's end, 2500 principals, supervisors and teachers had gone through the K-ECE training. To handle these numbers, 60 educators, primarily classroom teachers with at least a year's experience in open education were trained as master teachers for the institutes. They were trained in a one-week institute in facilitating and advising, as well as in the theory and philosophy of developmental learning psychology. At four university sites, the 60 master educators led workshops and discussions in teams. After the week of residential training, principals helped with follow-up for their schools during the year.

District Coordinators

The mushrooming expansion of the program has caused those responsible to become concerned about the quality and staying power of the open movement. They rely on the institutes and the eight district coordinators who share the major responsibility for institute planning, and also act as on-site consultants to all K-ECE centers in their region. The coordinators' salaries have been paid through EPDA and Title III funding. Four of the 1973-74 salaries are being provided through state funding; the others will come from Title III. All eight coordinators meet together at least two days each month to plan workshops and advisory services. Although turnover among the coordinators has been large (about 50 percent left after the first year), and their backgrounds are diverse (a kindergarten teacher with an MA; a principal; a Ph.D in administration; consultants from LINC; graduates of the early childhood program at the University of North Carolina), they have become a closely knit group because of their need to make joint decisions concerning program policy. It may be that the ultimate success of the program depends upon the coordinators' presence in the program--their inservice workshops that provide immediate and relevant help to teaching staff, their general problem-solving strategies, and their help in selecting participants and school sites that will offer the greatest chance of success to the kindergarten centers.

Don Williams is Headmaster at Goring-on-the-Thames in Oxfordshire, England, when he is not a consultant to K-ECE program in North Carolina. As a district coordinator, Williams attempted to spend one day in each of the ten schools he served. He held math workshops, talked to teachers and principals about specific problems, helped to physically rearrange a classroom so that more learning centers could be accommodated, or served as a master teacher by working with the children. Since the program is expanding so quickly, the coordinators will have to spend more time in large-group workshops rather than visiting schools. Because the coordinators'

staff will not be enlarged, nor the number of coordinators increased, Williams is afraid that the coordinator will become exclusively an administrator. He says:

> We must be able to offer ongoing training to those existing sites. One extra year of schooling won't make a difference to the children, if their teachers aren't adequately trained.

However, he is not without hope that the summer institutes can accomplish their objectives:

> The strengths of the American system lie in the nature of the people; they are more open, less difficult to motivate towards this way of working. British teachers take longer to change and tenured positions cause them to be more difficult to move toward new approaches. The major stumbling block in the American system, as I see it, is the need to evaluate almost anything that moves.

Commenting on the difficulties special education teachers experience upon giving up their accustomed roles to become part of the regular staff, Williams says:

> We have to allow teachers to grow just like we let children grow. We threaten teachers far too much by expecting them to make rapid changes--it takes a long time until good relationships between the children and teachers, between teachers and teachers, and between teachers and principal, provide the right quality of living, day-by-day. It begins with looking at what the children need, and after a long period of experimentation and growth, that may lead to an integrated-day, multi-aged arrangement.

Evaluation

LINC conducted evaluations by comparing pre and post-test results from the Harris-Goodenough Draw-A-Man Test and the Test of Basic Experiences (TOBE), Stanford Achievement Test, and Classroom Behavior Inventory.[3]

> The pre-test sample for the 1971-72 Annual Evaluation of the North Carolina State-Supported Kindergarten/Early Childhood Program is composed of the 2,286 five-year-old children who were administered the pre-test battery by their classroom teachers before October 15, 1971. The teachers also administered the post-test battery in May [1972]. The post-test sample was applied to 711 children in 16 centers randomly selected from the 54 participating centers. Some 277 six-year-old children, who were enrolled as kindergarteners the preceding year, were also randomly selected by centers for inclusion in the evaluation.
>
> (There is no way to count the number of teachers and students who are influenced indirectly by the kindergarten/early childhood activities. There is evidence that indicates that entire schools, and entire school systems, are affected by our small core of advocates for child-centered instruction.)

Conclusions of Evaluation

1. Draw-A Man Test: It may be concluded, based on the data from the pre- and post-test administrations of the Draw-A-Man Test, that children involved in the North Carolina kindergarten program will gain approximately two months in mental age for every one month of involvement in the program. The available data also indicates that children are making larger yearly gains as the program progresses. There are two factors contributing to this conclusion: (1) greater sophistication in administering the test due to better instruction during the summer institutes from LINC staff; and (2) better overall staff development via the summer institutes and follow-up training sessions.

2. Test of Basic Experiences/Language: Five-year-old children who participated in the North Carolina kindergarten program for the 1971-72 school year progressed from a mean raw score of 16.0 (32nd percentile) on the TOBE: Language at the beginning of the year to a mean raw score of 22.0 (74th percentile) on the post-test, for a gain of 42 percentile points.

3. Test of Basic Experience: Mathematics: The participating five-year-olds advanced from a mean raw score of 16.5 (32nd percentile) on the TOBE: Mathematics pre-test to a post-test score of 21.4 (66th percentile), indicating an increase of 34 percentile points.

4. Stanford Achievement Test: The six-year-old children who attended a state-supported kindergarten as five-year olds scored on or above the grade level equivalent of the national norm sample on four (paragraph meaning, vocabulary, word study skills and arithmetic) of the six subtests of the Stanford Achievement Test. The six-year-old sample scored only one month below the national norm on the two remaining subtests (word reading and spelling). The six-year-old sample scored two months above the national norm on the vocabulary subtest.

5. Classroom Behavior Inventory: There were significant (at the .001 level) positive changes on all three subtests of the CBI for the participating five-year-old students. It may be concluded, therefore, that children who participate in the kindergarten/early childhood program: a) show more extroverted behavior at the end of the year than at the beginning; b) appear to be more considerate and tolerant of others at the time of post-testing than at the time of pre-testing; and c) appear to complete more initiated tasks at the end of the year than at the beginning. The mean raw scores on the CBI for the six-year-old sample indicate that the changes produced by the kindergarten experience were maintained through the first grade.

Conclusion

In classrooms where teachers encourage children to pursue learning in an independent, even unorthodox, fashion; where learning is assumed to grow naturally out of a child's daily life and interests; and where teachers have the knowledge and confidence to provide an environment where all styles of learning are equally valued--there the handicapped child has a chance to feel himself/herself a part of the whole classroom. He is not a problem for the teacher to solve, but one child among many children who are acquiring new concepts, skills, and attitudes at a pace and in a manner that respects their individuality and uniqueness.

Open educators are convinced that this approach will ease the integration of handicapped children into the regular classroom. Early childhood educators in North Carolina are engaged in bringing this kind of classroom to their state. Careful observation of this movement is necessary for those concerned with the mainstreaming of exceptional children into regular classrooms.

FOOTNOTES

1. Division of Kindergarten-Early Childhood Education, Information about Kindergarten-Early Childhood Education (K-3). Raleigh, North Carolina: North Carolina Department of Public Instruction, Mimeo., 1973.

2. Projects for the Education of Handicapped Children. Raleigh, North Carolina: Department of Public Instruction, Division of Exceptional Children, 1972, p.26.

3. All information quoted directly from North Carolina State Supported Early Childhood Demonstration Centers, Third Annual Evaluation, 1971-1972, The Learning Institute of North Carolina, 1006 Lamond Avenue, Durham, N.C., October, 1972.

A rural cooperative venture that trains itinerant teams and school-based specialists to maintain handicapped children in the regular classroom through the use of a flexible, but structured, communication model called Learning Analysis. Essentially directed toward discovering the child's own learning strategies, reinforcing his academic and emotional strengths, and to promoting an atmosphere of self-renewal for the child, teachers, and team members, the program has been in existence for four years and shows every indication of expanding its services. Where specialists must be provided on an itinerant basis, due to geographical or financial considerations, and where administrative arrangements are responsive to the needs of individual situations, the model has proven successful.

NORTHWEST COLORADO CHILD STUDY CENTER: A LEARNING ANALYSIS APPROACH*

In rural Colorado, on the Western slope of the Continental Divide, is a five-district cooperative that has been pooling money, people, and ideas since 1966 to help children with learning handicaps. Encompassing a 6000-square-mile, three-county area, The Child Study Center represents one approach to serving handicapped children in rural areas on a small budget.

When ESEA money was made available in 1965, Donald Sanders, a consultant in Special Education at the Colorado Department of Education, was interested in helping districts use Title I money to increase their special education funds. Three Routt County school superintendents, faced with the problem of trying to provide resources beyond a minimal remedial reading/speech therapy program for their students, and unable to afford full-time specialists, decided to combine their federal monies ($5800), and the first Title I cooperative in Colorado was formed. Don Sanders was hired as its Director of Special Education.

The first year of the cooperative, two self-contained classrooms were operated for thirty children who were bussed from neighboring communities and housed in the Steamboat Springs junior high school. Sanders explains that first year, "My orientation was like anyone else's - I was interested in

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protecting the children from pressures, and hiring people who understood their sensitivities." But Sanders knew that the real difficulty in remediating special education children from their self-contained classrooms was in convincing the classroom teacher to take them back. "You become almost afraid to do too much for them if the system won't readmit them," he explains. Wanting out of that double bind, Sanders attempted a new approach. He proposed a program to USOE, Title III, "Classroom Management of the Handicapped," that would develop a model whereby handicapped children would be maintained in the classroom by means of an itinerant team and one special education teacher permanently housed in the school, but now designated a "Child Study Teacher." The name change was more than a semantic ploy; it indicated a child-centered, team approach that was to become the basis of the program for the next four years. The Title III proposal focused on evolving a "Learning Analysis" approach that would provide regular teachers with the team support to maintain handicapped children within the classroom. The proposal was accepted and funded for $61,000 in 1969, $44,895 in 1970, and $38,000 in 1971. The project is now solely supported by district funds.

Basic to the assumptions of the Learning Analysis Model was the notion that a series of benefits would accrue from working with exceptional children in familiar environments--both regular classrooms and their own homes. It was felt that academic progress and self-concept improved by association with regular students; that parents', teachers', and peers' opinions of the child became more accepting when the child became part of normal school routine; and that the child's social skills and affective behavior showed signs of greater harmony with acceptable behavior standards in the regular classroom.

The first year of the Title III grant was spent in planning, and the self-contained classrooms were maintained. Sanders looks back over that initial experience;

> We didn't know what else to do but to tell the classroom teachers that we wanted to help them. Their reaction was one of confusion. The primary teachers had the idea that we understood what they wanted all along; they saw us as a partner, but the intermediate teachers felt that we wouldn't be able to relieve them, or that we couldn't do what we said we would.

The proposal had been written to focus on the primary grades (K-3), but the 4th, 5th, and 6th grade teachers wanted the relief as well. Sanders feels that focusing on the primary children at first was protection for the project. They simply could not have managed, in that initial year, all the children who needed attention if the entire elementary population had been included. And the primary teachers were philosophically in agreement with the concept of mainstreaming. Sanders says,

> One of the reasons we changed from the self-contained program was that the children weren't being referred early enough. We suspected teachers didn't know how to identify them, or didn't want to point them out as retarded. They hated to have us take a child out of their room, and that was an asset.

The Child Study Center provided inservice to 25 primary teachers in the first year--there were workshops, retreats, and an inservice coordinator from the University of Northern Colorado who offered evening courses that some teachers took for college credit. The inservice training focused on early identification of deviant behaviors, child development theory, and positive affective behavior between teachers and children. Primarily, however, the teachers were introduced to the Learning Analysis approach which remains the foundation of the process used by the Child Study Team to "provide mutual support and help to all those people concerned with the child."

The Team

The coordinator and pivotal member of the Child Study Team is the Child Study Teacher (CST). There is a CST in every building in the cooperative--11

at this time. All CST are credentialed EH or EMH* teachers; their previous experience is extremely varied. They are chosen primarily for their desire to work in a collective effort, and their commitment to the concept that a mutually supportive atmosphere is the most effective way to create an environment that will help children with difficulties. They must be skilled people who are willing to share their skills. Sanders says,

> You really know what accountability is in a team situation, because you have to know what your objectives are and be able to state them clearly; you must be able to say "here's what I'm trying to do, and here's where I need help." If you're working as a loner, you can work with a child and not be called upon to articulate these things.

The CST is the link between the Child Study Center staff and the classroom teacher. How a particular CST works in any building depends upon the general school environment, the expectations of the staff, the principal's perception of his instructional role, the exceptionalities of children needing the services of a CST, and the physical facilities. One of the buildings is participating in the IGE system,** which calls for a complete restructuring of teaching arrangements, and team teaching has been implemented. Another building has participated in an affective training workshop which has brought about tremendous changes in teachers' attitudes concerning the importance of students' self-concept and self-expression. In some schools, the CST works with very few children directly, concentrating instead

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*"An educationally handicapped child is one whose behavior manifests itself in such a manner that it is interfering or is likely to interfere with the child's own education process or the education process of others...An educable mentally handicapped child is one who, because of retarded mental development, is unable to participate in or benefit from the classroom program regularly provided, but who nonetheless possesses the ability to learn..." Administrative Procedures for the Special Education Program. Denver: Colorado Department of Education, 1970, p. 3.

**A design for reorganizing school personnel to improve curriculum and individualize instruction which was developed by the Research & Development Center for Cognitive Learning at the University of Wisconsin. Klausmeier, H., Morrow, R., and Walter, J. Individually Guided Education in the Multiunit Elementary School; Guidelines for Implementation. Madison: Wisconsin Research & Development Center for Cognitive Learning, University of Wisconsin, 1968.

on giving the teachers a chance to explore, in their own ways, forms of individualizing programs. All children are viewed as potential recipients for special education services then, because, at any one time, there may be any number of children experiencing difficulties. In other buildings, the CST may work directly with several children a day, following a program of behavioral and academic objectives that have been determined through the Learning Analysis model. The CST may work with the child in the classroom, or on a pull-out basis, depending upon the teacher's willingness to have the CST in the classroom, the child's willingness to leave the classroom, and the facilities available for the CST for work with the child. No child remains out of the classroom for longer than an hour a day, most of them for much less time.

The Child Study Center provides itinerant teams to supplement the work of the CST. A team consists of a psychologist, a social worker, and a speech therapist, and there are three such teams. A team visits each building in the cooperative at least once a week, more often twice. The building principal and Donald Sanders of the Center may also be team members. The amount of time and effort the principal contributes to the work depends upon his own judgment of his involvement in the process. The principal of the school participating in the IGE system was very enthusiastic about the changes taking place in his school, and gave a great deal of his time to the team. Sanders is less able to get to each building as often as he would like, since the Center serves five districts, covering large distances. His role is one of review and interpretation of program goals, responsibility for effective staff interaction, and administrative agent of the Child Study Center Board.

The roles of the psychologist, social worker, and speech therapist are intricately woven into the fabric of the Learning Analysis approach. The psychologist's prime function is to draw out the teacher to state the child's

problem clearly, to understand it, to encourage the teacher to explain what he/she has thought about the problem, and to support whatever sounds good, i.e., latching on to what makes sense. Rather than using a conventional series of tests to pinpoint these areas, the psychologist typically will observe the child in the classroom and/or meet with him for individual or small-group talks. He is further involved with the parents, both in home visits or at a team meeting, in an attempt to foster a consistent learning environment for the child. The social worker's contribution to parents and children takes the form of nonclinical counseling and other supportive behaviors. The speech therapist's primary responsibility is to explore the methods that best help the child alleviate speech, language, or hearing problems. The speech therapist shares the methods and materials he/she uses with classroom teachers and parents.

Learning Analysis and How It Works

Learning Analysis is a five-step process designed to facilitate communication and mutual support between the Center staff, the classroom teacher, and the child. It is a problem-solving technique that depends upon the interaction of people for its success. Throughout the five steps, there is an emphasis on communication to promote mutual trust and confidence and getting to know each other as people, not as specialists. The five steps consist of:[1]

1. Developing awareness through active listening, which involves verbal and nonverbal skills.
2. Expressing positive feedback relevant to the message articulated by the other person.
3. Organizing a learning strategy to zero in on some basic, but achievable, aspect of the problem.
4. Exploring the learning environment with an attitude of joint venture that focuses on the child's assets.
5. Establishing closure on some aspect of the problem through a joint solution.

The process of Learning Analysis was designed to help all children learn how to become more confident and feel more fulfilled; and to help them develop positive self-concepts through encouragement and positive experiences. The assumptions under which the program operates are 1) parents and teachers together can best help the child develop his unique qualities; 2) realistic levels of achievement should be expected of the child; 3) all children can find a level at which they can succeed; and 4) the Child Study Team practices encouragement and reward for success.

The Learning Analysis begins with the classroom teacher's referral of the child to CST. The teacher indicates, on a written form, the particular problems he/she perceives the child is having. The point of the first meeting (referred to as a "staffing"), which usually includes the three-member team, the CST, and the teacher, is to isolate the problem that the team will work on. Each member of the team works to discover the child's strengths and to find ways to accentuate these while attempting to uncover the personal learning techniques the child may be using to compensate for his difficultjes. The second step in the process is for the psychologist and the CST to observe the child in the classroom to determine which factors contribute to his strengths and which deter him from success. If it is thought that some testing will provide a clearer picture of the problem; an ITPA, WISC, or other instrument may be administered, but it will serve only as a small piece of the puzzle. After a period of observation and analysis of any tests, the team will meet again and plan specific learning or behavioral objectives for the child. The Learning Analysis Plan, written by the CST, lists specific objectives--determined with the student when feasible--stating that the student is able to do specific potentially achievable tasks only with help from a specialist or other assistant. It also indicates what previously difficult tasks the

student learned to do independently (which must relate to the specific objectives). These objectives are reviewed quarterly by Sanders and the Child Study Team. Sanders explains,

> If we're not really accountable, then an objective can be written such as, "child completed a level in Distar." To complete a program is not an objective; it is not an analysis of learning. The CST must learn how to think the objectives through clearly so that they are attainable by the child.

This is the first year that the objectives for students have been put in writing. Previously, feedback in the form of teachers' subjective judgments of the child's progress was used as a gauge. Sanders made the switch to writing objectives because he felt that the Center staff was leaning too much toward teacher advocacy; he now wants to involve the child more directly in what the staff is doing.

> This is about as cognitive as we get. It allows for the evaluation of a problem or an objective. The rest of the model is almost a language, when its done right. We hope that this model of talking to each other would be exemplary of how teachers might talk to their kids.

Once a learning strategy has been developed, and each member of the team is satisfied that it reflects their understanding of the situation, the CST has the responsibility of supporting the classroom teacher to implement it--whether through direct help to the child, or in conferences with the teacher or parents. The CST records the child's progress on the Learning Analysis Plan and, as progress becomes apparent, periodic written evaluations are made. If the strategy appears not to be working after a certain period of time, the team has another staffing and new ideas are generated, and the process continues until demonstrable improvement has been achieved.

The Problems

Resistance to change: Anytime the usual balance is changed there are resistances. Thus, there must be strategies for meeting resistance. In any new program where people are asked to relate in new ways to each other, to new

staff members, or to exceptionalities in children they perhaps have not met before, there will be resistance on the part of some staff members. The Child Study Teams were asked, "What successful mechanisms have you used in overcoming resistance to change?"

One CST feels that the fact that she is a full-time member of the building staff is the most essential aspect in alleviating resistance.

> Teachers' resistance was pressure-based because of not knowing whether they would have enough time to deal properly with these children. In some cases, adding aides and helping them to restructure their rooms helped overcome resistance. But helping one teacher to succeed became a model for others--that was what convinced them the most. They saw results, and that validated us.

Another CST says,

> At first the teachers were hostile to my role. I had been a remedial reading teacher in the building and had always pulled the kids out of the classroom. The other teachers were accustomed to this and they felt that nothing could be done if the kids remained in the classroom. When I stopped taking kids out that first year, they were pretty annoyed. I felt that I had to break away from the old way of doing things, so I completely refused to pull any child out for work. I found a few teachers who would let me go into the classroom and work with children there. This year [the second], I have started to take kids out because it's more convenient and I can afford to do that now; the teachers no longer expect me to work exclusively on a pull-out basis. Now, some teachers use me completely differently than others--they'll ask me what to do about a specific problem, or to test a child, or to come up with a new idea for a child who we're not working with but whom she knows needs a little something extra.

A team psychologist says,

> If we can talk in terms of the affective side of the child and show that we think about him in a very positive way--talking less about his negative aspects and stressing his strengths--with the collective strength and will of our staff members, we do overcome teachers' resistances.

A social worker notes,

> If the teacher thinks that there are no alternative ways for dealing with a child then she may decide what must be done for that child in a very narrow way. She does not see any other possibilities for him. Then she may view us as obstructionists to getting the child channeled in the direction she envisions for him. But we offer alternatives in any situation--there's no one narrow way to go. We don't need to be limited that way. And maybe it takes someone from outside the daily situation to offer that objective kind of help.

A superintendent adds,

> The most important thing is to have patience. When you start a program like this, most people don't think you can do it. You have to give people time to come around to it. You have to build confidence with the other teachers; you have to have competent people. I wasn't convinced in the beginning, but the staff showed me they could do it. And the other teachers began to be convinced, as well.

A principal recalls,

> When the Child Study Team came in, I tried to keep an open mind. We knew we needed help in many areas, but we had to sell the staff on it, because they felt that they were being interfered with. Workshops and inservice training held before the team came in were somewhat helpful, but the teachers remained skeptical. What changed their attitudes was seeing that they just weren't reaching some of the special education children, and that it was possible to reach them. They were helped to recognize the problems that these children had, and what could be done for them. The Center also helped us to find paraprofessionals. And, at first, the staff was afraid that their jobs were in jeopardy--that the teaching staff would be cut down. That was not our intention, and we made sure the staff realized that the aides were there to help. It's a rewarding thing to see children get help that they never had before--that makes me happy.

Sanders explains,

> If the process is well done, we avoid false expectations. That's what can get us in a bind. We've learned that when we're having trouble it's because someone has an expectation that doesn't coincide with ours. If we can put our finger on what it is we need to do with the teacher, student, and parents, then whatever we are able to do, we do. We still may not know what to do about every problem that a teacher will bring up. Sometimes she will come up with her own answers when she sees how the process works. And if we don't know how to work with a certain kind of child, we just have to learn.

Because team members openly communicated their uncertainties and inabilities with the regular teaching staff, the entire process was demystified. It eventually became apparent to the teachers that there is no one way to help a child; there are no huge obstacles to overcome, there is simply a process that proceeds through a mutuality of respect and shared exploration.

The Successes

The Child Study Team forms the base upon which the administrative hierarchy is built. The team is directly responsible to the program director who, in turn, answers to the Child Study Center Board, which is composed of the five district

superintendents. Don Sanders credits this arrangement with much of the success of the program. He feels that it is critical to have the decision makers actively involved both in the planning and maintenance of the program, even though each superintendent has quite distinct ideas about the way the team should function in his buildings. Respect for these differences characterizes the Center approach at both administrative and staff levels. That each team functions well in quite different arrangements at each school speaks well for the flexibility of both the Learning Analysis theory and the people practicing it.

In the one school that adopted IGE's team teaching structure, the CST found a tremendously supportive atmosphere for her work; there is a built-in desire to share ideas and skills, and the team teaching situation encourages that desire. This particular CST works with very few children directly; she trains the teachers in the use of various techniques, the teachers do most of the individualizing work with the children. Both the IGE and the Learning Analysis approach stress the importance of identifying the child's learning styles and strategies and the two structures work in a completely complementary fashion.

At another school, 150 miles away, the staff participated in an "affective training workshop," sponsored by the Interstate Educational Resource Service Center[2] in Salt Lake City, Utah. Training teachers to relate to children on an intimate and individual basis caused one teacher with 16 years experience to completely restructure her kindergarten classroom toward a more open, integrated concept. She explains how the CST helped her:

> The CST reinforced me by having me talk through my ideas about the children. Through this I came to some pretty good ideas, just by having someone to talk to. I found, in all the years that I've taught I really didn't know how to talk to children--to find out how they were feeling. Now I want to know how to get them to express their feelings

and get rid of some of their hostilities. By the time my children reached third grade they were in some pretty severe failure patterns, and I couldn't figure out why, but I thought it must be something that starts in kindergarten. I didn't realize until this year that it was the structure itself--we were just expecting too much from them. So now we've loosened up a lot and let them plan many of their own activities. I still need a lot of help; we're woefully inadequate on observation techniques--we're seeing things, but we don't know what we're seeing. The CST has been very helpful in this respect, but I use the team even more with parents now. Because I'm working with the total child, rather than just their cognitive skills, their parents are becoming a lot more involved. They're coming to conferences and telling me about their home problems, so the team psychologist sits in on more of these conferences with us.

The Center's relationship to the community is interesting. The Board of Education is only slightly involved in the program, although they are invited to various inservice programs. They had no objection to putting the program in the budget because after the third year, when local financing was necessary, they saw that it was working. Sanders comments,

> We receive a lot of publicity in the local paper, but I really doubt that there are too many people who fully understand what we're doing. I don't regret that. It may be symptomatic of our casual approach and that the program isn't an entity--or an independent service unit--we're simply supporting the school district.

Another contributing factor towards success was the complete lack of any special education program in some of the districts before this cooperative program began. The community and parents were pleased that something was being done for those children who had been attending school, but clearly were not being helped in the ways they needed. Parents who might have been resistant in the past to the information that their children had problems (but no one knew quite what they were) became extremely responsive to the Center's approach: "How can we all work together to make things better for your child?"

An additional success factor was the use of paraprofessionals made available by the Center. Usually people from the community, their help was essential in the individualizing process. One superintendent says that it is the aides that really make the difference to the program's success and

without them it would be very difficult.

One superintendent who joined the cooperative after it formed remarked,

> It's more difficult to correct something than to begin something new. Our success is largely due to that newness: we had no tradition of special eudcation in the district to overcome. Teachers were able to see for themselves how a mentally handicapped child could be helped in the classroom. Individualizing students' programs so that they were challenged to work and encouraged by their achievements made it possible to measure their successes. Skeptical teachers saw that and began to be convinced.

This superintendent and his staff have observed definite change since the Center's program began. They aren't having nearly the number of problems with children in the intermediate grades today as they did four and five years ago, because they're able to diagnose their problems. They have learned how the children learn and what their patterns are, and to conduct the kind of teacher-to-teacher conversation that best describes the way a child comprehends a particular skill.

Another superintendent warns that success can't be seen in 60 or 90 days. In fact, for the first six months it might look like a dubious venture, because it takes time for people to trust each other and confidence to grow. It also takes a core of people who are willing to stay with the program for a few years and who are gratified by relatively small changes, because they understand that permanent change is effected by many small changes - over time. Otherwise; regression is predictable.

The principal of the school structured on the IGE plan says that the CST has trained his teachers to work with their students so well that, if the CST left, the teachers could continue to plan strategies, using the Learning Analysis model, for children in trouble. However, it is not Sanders' intention to withdraw his CST from the model, because he views that person as the necessary link between the classroom teacher and the itinerant staff, and the catalyst through which change occurs. He is convinced that any school already has what it needs

to develop this model, and that he can show them how to develop their own resources.

Sanders is interested in seeing the Child Study Center model replicated in other areas of the state. He feels that his staff can work with whatever resource people the local schools have, but it is very important for the local districts to hire their own people. Sanders can provide psychological, social worker, and administrative resources. If the school or district can come up with one special education teacher, he/she can become the coordinator (CST) for that school.

The way he would begin to develop the model in a new situation would be to work with the new teacher, now a CST, to show him/her how to listen very carefully to what a referring teacher says so that the problem can be isolated and defined. Once the problem is isolated, the team shows the CST how to move through exploration to some point of closure where specific help is provided. The CST learns how to inform the referring teacher that she has been heard and understood, and that the CST thinks a particular area would be a reasonable beginning point. She then sees the child and shares information with him about why the team is involved in his life, and arrives at an agreement with the classroom teacher and the child that the goals set up are mutually held by all of them.

Staff Training

In a program that stresses open communication and personal interaction, it is appropriate that training for the CST and team members is rather informal and loosely structured. During the first year of the project retreats were held which gave the staff a chance to get to know each other outside of their work situations. Workshops were held to explore new approaches to learning, and training given in the identification of learning disabilities and techniques

for remediation. In the past few years the inservice training for the Center staff has amounted to the one-to-one interaction that occurs when they are experiencing difficulty with each other or with a particular child. The staff also considers their work with the classroom teacher as a form of inservice, because the objective is to improve the teacher's skills and confidence so that he/she can assume more responsibility for the child's progress. The Center staff is reluctant to set up a structured inservice program; they want to meet together when the need arises and work out the problems they perceive as they occur. "As long as you have people who are pretty self-actualizing," says Sanders, "then the inservice can respond to their needs."

That the training approach is eclectic is best demonstrated by the staff's attitude toward behavior modification techniques. The team social worker says,

> With the child's/parent's participation we use behavior modification techniques to modify the child's behavior so that it is more appropriate to the situation, or to develop motivational drives through a system of positive rewards, or to alter the reinforcement schedules that the child is already into. We don't use the charting method, but we do use the concepts and some of the techniques on an individual basis. Behavior modification and the humanistic approaches can blend. It's a quicker, more expedient intervention. Parents, teachers, even students choose this approach as often as psychologists do, perhaps more often. The psychologist or social worker develops the schedule which is then applied with the child's cooperation - he knows what he wants to achieve. I feel more comfortable with it being used by our staff because all of them are a bit afraid of it. They really don't want to use it too much because potentially it's very powerful, and we're reluctant to assume control or powerfully influence others without that being their decision too. If that is their decision we will support them, if the desired change is appropriate, legal, etc. It is done together.

The staffings themselves become a learning situation for all the team members every time they occur. As the team explores with a teacher, and/or a parent, the behavior patterns a child presents, as they decide what to focus on, with everyone contributing ideas and questions, each person leaves the staffing having learned more about the child, themselves, and each other.

After the parent and teacher have left, the Center team remains to discuss with the CST what they might have done differently, what they will try if the present strategy doesn't work, and how they can be more supportive to each other, the child, parent, and teacher. The emphasis is on success--how they can create the conditions for the child to experience success in his efforts and what they need to do for and with each other so that the process improves. This is an on-the-spot training/learning situation that many inservice programs lack, and that many teachers find the most valuable.

Evaluation

Available data is from the third year of the program.[3] The specific objectives were:

1. Handicapped students with a favorable prognosis* will be helped to the degree that they (a) can participate in the regular classroom program and (b) can continue their education with no further assistance from the specialist.

2. The efficiency of students having handicaps with less favorable prognosis will be increased to the extent that they (a) can remain in their regular classroom program and (b) can continue their education with decreasing assistance from a specialist.

3. The continuation of the Title III project philosophy and relevant activities will be insured beyond the final project year.

4. Teachers will display a preference for the project program (provided they receive assistance from specialists) over a traditional self-contained special education program.

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*Sanders explains the usage, "A 'favorable prognosis' in a child is determined by the length of time the child has been disabled, the kind of condition, teacher observation, etc. We separate the handicap from the disability: the disability is the disabling condition; the handicap is the degree to which the disability is a problem for the child. Our prognosis is in regard to the handicap, not the disability. The handicap then, speaks of the behavior--the way the child responds because of his disability."

Instruments used to determine whether the objectives had been achieved were a student follow-up survey, student problem records, staff reports, superintendents' mid-year reports, case studies, and a teacher adequacy survey. Data were accumulated monthly from student evaluation reports and quarterly from adults working directly with the children through follow-up summaries and case studies. Data were in the form of frequency counts translated into percentages and reported item by item. Combined ratings of classroom teachers were summarized. Out of a total 272 students referred to the CST in 1970-71, 123 (45.2%) required no further assistance from the CST or the team after the initial staffings in order to remain in the regular classroom. Fifty-nine students (21.7%) were able to maintain adequate performance with decreasing assistance from the CST or team. Teachers' preference for the project was determined through data gathered at a mid-year superintendents' conference held in each district. Teachers discussed their reactions to the project in small groups, and each group rated their preference for this project, compared to a self-contained arrangement, on a seven-point scale (1=high; 7=low, average rank ordered):

Statement I would prefer:	
resource room and specialists available to students and teachers.	1.7
Learning Analysis as presently operated.	2.8
segregated special education classroom for part of the day by schedule.	3.4
resource room and specialist available to students (only).	3.5
itinerant specialists to test and prescribe remedial programs.	4.6
individualized assistance from specialist without Learning Analysis procedures.	5.6
special education in self contained classrooms.	6.5

The continuation of the project has been insured beyond the final funding year since all five districts committed local revenues to totally support the project. The amount necessary to continue the program was $34,070.

No claims of generalizability of data are made by the staff, but they do maintain that:

> [T]he notion that handicapped students can learn within the mainstream of the school is generalizable. However, it must be emphasized that support personnel, i.e., psychologists, special education teachers, social workers, speech correctionists, all provided valuable assistance to the most significant person in the handicapped student's educational world--the teacher. The generalizable question, of course, rests with the attitudes and skills acquired by this person in coping with the handicapped child.[4]

The staff continues to experiment with assessment measures, particularly in the affective realm. They are not satisfied with the available instruments and are attempting to develop their own projective measurement of self-concept. They feel strongly that it is essential to be able to demonstrate gains in nonacademic areas.

The Future

On January 1, 1973, the state was divided into 12 planning regions for statistical purposes. According to mandatory legislation, by 1976 all districts will have to have special education programs; districts will have the choice of developing their own programs independently, joining a cooperative and letting someone else develop their program, or combining both (three counties cooperate to purchase services). But all districts are required to submit a tentative plan for how they're going to serve their handicapped children by January 1, 1974. By this decree, the state is encouraging local districts' creativity to develop what best meet their needs; the state is encouraging coordination between special and general education. Previously the Child Study Center had been ahead of the times in working toward that goal.

Replication of this Learning Analysis model in other areas--rural or urban--may first involve picking out one school in which to demonstrate it and then creating a staff understanding of the kind of commitment involved. It can be a high-risk program, because it depends absolutely on the respect and confidence that people are willing to give each other. The necessary minimum amount of commitment would be a few teachers willing to examine alternative ways of accommodating children who have been previously excluded from regular classrooms; a principal who is willing to become part of the Center team and attend staffings so that he is familiar with the process; a superintendent who will take an active part in establishing the program because he sees it as a way to serve children who have not had help before. "You can't impose the model where it's not wanted by the key people, and we wouldn't want to do so," states Sanders.

FOOTNOTES

1. Northwest Colorado Child Study Center. Learning Analysis. A (PACE) Project. Steamboat Springs, Colo.: Steamboat Pilot Publication. Undated.

2. IGRSC serves eight states (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming), through Title V and state funding, to provide "support in the identification and specification of affective goals and objectives...and assistance in the developmental procedures, techniques and instruments for assessing affective outcomes or conditions which facilitate or inhibit affective growth and development." Wight, A. Toward a Definition of Affect in Education. Monograph. Interstate Educational Resource Center, 710 East Second South Street, Salt Lake City, Utah 84102, May, 1972.

3. Classroom Management of Handicapped Children. ESEA Title III, End of Project Report. Steamboat Springs, Colo.: Child Study Center, 1972.

4. Ibid., p. 62.

Phased out at the end of its third year, the Bridge Street Elementary School mainstreaming program in Yuba City, California, included 18 EMR students, ages 11-13, in regular classes for three years with some 100 other students of 4th, 5th, and 6th grades. It was a teacher-generated program, with no funding other than special education state money for the 18 students. Each of the four teachers assumed instructional responsibility for all students, even though the students remained with one teacher during the day. The strength of the plan was that the teachers were able to work with an integrated classroom of children with a variety of learning abilities, and aid their social and academic growth by team planning, flexible thinking, and a great deal of hard work.

YUBA CITY, CALIFORNIA: TEAM PLANNING FOR INTEGRATION*

Three years ago, Earl Perillo, a special education teacher, and two of his colleagues at Bridge Street Elementary School--Wilma Bradshaw and Mary Lou Meckfessel--combined forces to provide a modeling atmosphere in which educable mentally retarded children could be maintained in regular classrooms. The three teachers had worked together for several years and were personally very compatible and mutually supportive. Further, they held these common assumptions about children: that when a group of children are isolated they take on each other's characteristics and their behavior deviates even more from the norm; that social behavior can be learned by modeling; that growth, both academic and social, will occur if the children are comfortable and the teachers are happy; and that the way to accomplish change is through collective action.

The Bridge Street program was a result of team planning, rather than team teaching. The distinction resulted from the physical arrangement of the building, rather than any philosophical disagreement with the concept of

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team teaching. The school is old and the facilities inadequate; the team teachers have their rooms adjacent to each other, but the walls remain intact, since according to the city code no alterations can be made on the building.

When these teachers attempted team teaching they found that the acoustics and the facilities for movement of groups of children were so inadequate that it became burdensome to continue team teaching. They reverted back to their original team planning approach.

Team Planning

Bridge Street is a K-6 building, but the handicapped children in the primary (K-3) grades are all housed at another school that uses an engineered classroom approach (modeled after Santa Monica) to remediate learning problems. For the past three years, after completing grade 3, these children transferred to Bridge Street at the 4th grade level, although they were generally somewhat older than their age mates at the time of their transfers. When this program began, there were 18 children in a self-contained special education classroom at Bridge Street. Perillo decided to merge these children with Bradshaw and Meckfessel's 5th and 6th grade classes by distributing the handicapped children evenly among the nonhandicapped children. Each teacher then had, within one classroom, a multi-graded arrangement, but each was responsible for the instructional environment for all the children. The three met in weekly planning sessions to discuss individual children's problems (not always the handicapped children). The objectives of the team planning approach to integration were:

to improve the self-concept of the EMR children;

to individualize math and reading instruction for the EMR children;

to increase acceptance of individual differences among members of the classroom by giving the EMR children an opportunity to work with "normal" children.

The teachers were specifically interested in determining whether EMR children would develop a more positive attitude toward themselves and their skills, or lack thereof, as a result of associating with regular students whose intellectual, social, and emotional behavior might serve as models. The teachers expected that the EMR children would progress as rapidly, if not more rapidly, in all learning areas than they had done in previous years. The teachers themselves expected to gain increased professional understanding and experience from the team association through the use of small- and large-group instructional methods. The first summer before the program began, the three teachers put in an enormous amount of time creating individualized lesson plans and learning contracts. By fall; the actual integration and regrouping of the students went quite smoothly in the classrooms. In their third year they added a fourth-grade teacher to the program so that they were able to serve 110 children.

The Problems

During the first few months of the program the principal received a number of phone calls from the irate or worried parents of regular students who were in integrated classrooms. In most cases these problems were settled over the phone due to the unquestioning confidence that the principal Henry Edwards and his predecessor had in both the experiment and the staff. Those parents who remained unconvinced were invited to observe the classrooms. In the third year of the program there were no irate parent phone calls, in spite of the fact that new children were added from the fourth grade.

Edwards became principal a year after the program began, and he saw that there was a great amount of alienation between the three teaming teachers and the majority of the other teachers in the school. He recalls,

> The first thing I did when I became principal, was to knock down this invisible barrier and introduce the rest of the school to the program. Then I would go into the classrooms and relieve the teachers for an hour or two and let them observe the program. As they learned about it, they became less negative.

The teachers commented on their separation from the other school staff:

> There were pockets of people within the school who were trying new things--people who learned from us, and we from them--but there was also a core of very conservative teachers who just didn't give credence to what wer were doing. At first they were hostile; then they pretty much just wrote us off.

It is ironic that teachers who believe so strongly in the influence of modeling behavior should have been so unsuccessful in affecting attitudinal changes among their own colleagues. They do admit that when they added the fourth member to the team the final year, it was difficult to incorporate her into their tightly knit group; they realize how hard it was for a new person to pick up the tempo and style that evolved over their years of working together.

A different kind of problem, but equally frustrating, was their difficulty in finding a wide range of materials and meaningful activities for children at all learning levels. The teachers discovered that some EMR children could learn "new math" and others couldn't, so they set up a continuum form of planning in which they could plug a child's lesson plan in at any level along the continuum. Their procedure was to work with three or four children at a time, using Sullivan Programmed Math, Continental Presses' Kit B, and their own daily quizzes, which were corrected every day. They also adapted the state text where possible and used Science Research Associates' crossword puzzles for drill and computation skills. Each teacher worked within one classroom with a range of abilities from the first to twelfth-grade levels. They found it very helpful to have as many different kinds of approaches as possible to everything they taught. Every bit of material--even if it was only used for one child--made a difference in terms of seeing progress or stasis. They observed that the child who has never worked before will begin to work when he/she can connect to what is being taught--

the child sees a reason to learn and then is motivated to try.

In order to increase their supply of materials, the teachers pooled whatever they had into a common area. Says Bradshaw,

> It looked like we had a lot, and the other teachers became somewhat envious, but when they saw that we were working every weekend on individualizing lessons, the envy quickly disappeared.

Says Edwards,

> Naturally, it is important to get as much money as you can to buy these games and printed materials to individualize programs. My budget was a lump sum of $6 per child which was cutback from $9 from the year before that. There was about $300 of special education money, which is the normal state allotment for an EMR class, that came into Bridge Street the third year and I matched that from my budget. The entire program cost no more than $600, and that money went for materials.

Classroom Management

Recognizing the importance these teachers attribute to varied and relevant materials, it is interesting to observe that the most distinctive characteristic of their classrooms was the emphasis on interpersonal behavior and the importance of training in affective interaction. Every day following lunch, the class sat in a circle and discussed whatever came up during the morning, on the playground, or at home that disturbed them. It was the only time in the day when the teacher would talk to the group as a whole. In these discussions the subject of individual differences often arose--how some people learn more slowly than others. It was a very natural process; there were no taboos about talking about these or any other differences.

The emphasis on affective interaction grew naturally out of the teachers' priorities. Earl Perillo had been an EMR teacher for 10 years before instituting this program. He believes that the EMR child's social growth is unnecessarily severely retarded by his/her isolation, and that he/she can learn better social behavior from models among the nonhandicapped children. As far as the daily management of Perillo's classroom went, all the children were encouraged to be extremely self-directed. They worked on a weekly contract basis, setting their own goals. Perillo made sure to see if the goals were too high or low for them,

but he generally kept out of a controlling role as much as possible. In the morning the children worked on math and reading contracts; afternoons were devoted to group discussions and activities. He used Continental Presses' Kit B for math because it kept track of students in a variety of ways, without a lot of verbal orientation. He tested all of his students on the California Achievement test in October, January, and May, and the Wide Range Achievement Test in September, November, January, and May to find out where the students were as they went along, so that programs were revised when necessary to meet their deficiencies. He was flexible about the daily schedule; he used contracts for a few weeks and then moved to a daily schedule arrangement to prepare the students for high school. The high school is tightly scheduled and he wanted the children to be able to cope with that, even if he personally didn't like it.

Similarly, he was flexible in his approach to changing students' behavior. He tried behavior modification techniques in his classroom but, after a while, became bored with them, and then began to question the idea of manipulation itself as a philosophical concept. He has used some of his own experience in Gestalt groups to provide insights into classroom situations, but the impression is that he viewed the discussion periods as a growth time for everyone and the process itself became as important as the completion of any particular discussion. The team approach was essential to his own well-being, "I got direct feedback from the other teachers and we built each other up when one of us was having a bad day."

Successes

The system factors that operated in favor of this program included the lack of large sums of federal or state monies that required continual justification or program validation. The staff began the program with the idea that, if it worked, fine; if it didn't, they would change it or disband it. Even though the data was positive, it was only marginal data. The teachers spent an

absolutely minimal amount of time on data collecting and analysis; they did what was necessary to satisfy the state requirements and their own needs to monitor the children's progress.

There was no pressure to do anything quicker or better in this program. People weren't pushing to prove that the model was valid. The emphasis on having as many alternatives as possible implied a lot of flexibility and willingness to learn on the teachers part, since they needed continual input to find alternatives.

The student population itself certainly contributed to the success of the program. Yuba City is a rural, agricultural community, largely low-income population. The children of these families can be accurately described as educationally disadvantaged, and there are Title I monies in two elementary schools in the district. Henry Edwards had only four identified gifted children out of 600 at Bridge Street. In Wilma Bradshaw's class she had "normal" children who tested out lower than the identified EMR students. She says,

> They haven't been identified as EMR, but they can't read. The kind of children we have forces us to individualize--if half your class can't read, how are you going to teach social studies out of the state text?

The way that they taught was to get rid of the children's fear of failure and give them some experience of success--then they began to see some progress. Because the normal achievement range was quite low at Bridge Street, the EMR child was not as visible as he/she might have been in another setting. Further, these teachers were used to low-achieving children and the necessity of pacing materials to their level. Individualization techniques that work for the EMR child are just as likely to work for a number of other children in the room. Acceptance of individual differences may have been facilitated by the lack of competitive pressure in the classroom. In fact, a sociogram run before mid-year 1973 indicated that the most popular child in the whole program was an EMR student.

Teacher observations indicated that none of the children knew who the EMRs were, and all EMR children had friends who were regular students. No stigma occurred since no knowledge of labeling existed among the children.

Subjective testimony of their success is easily obtained. Says Bradshaw,

> The social change in the EMR children was incredible. I had a brain damaged child who wouldn't talk at all last year. This year she really speaks out and volunteers all sorts of information. This was the kind of sunshine we kept looking for.

Superintendent of the district, Androus Karperos, was director of Special Services at the time the program began, and he speaks very highly of the way in which the staff and principal conceived and worked out the program. He regrets that there was so little administrative time devoted to it, and that the teachers had to carry the entire load. He and the staff agree that a better evaluation design would have allowed them more accurate feedback on students' progress, but there were simply no resources to do that.

Performance Objectives

Performance objectives for 1972-1973 were greatly modified from the previous year when it was found that very few of the normal children were at grade level or higher when they entered the program. Additionally, it was felt that the test results of the EMR students, as measured by the Stanford Achievement Test, were not valid because the test started at such a high level that many of the EMR children could not read the questions. The Wide Range Achievement Test started at a much lower level, thus showing a more valid measurement of the children's achievement and was used in the third year of the project. Final evaluation was submitted to the superintendent on June 30, 1973.

Performance objectives for the third year were:

Seventy percent of the EMR students will show greater growth in the experimental program as measured by standardized achievement tests (September and May)

Seventy percent of the student population will show greater growth in test scores on the standardized diagnostic and achievement tests (pre-September and post-May)

Seventy percent of EMR students will show an improvement on self-concept scales (Jesness inventory and sociograms)

Forrest Rounsaville, psychologist for the district, who initially had reservations about the program ended up fully endorsing it. He said he is not satisfied with the measures he has in terms of providing some numerical, easily understood description. The subjective descriptions from the teachers were very satisfying; they indicated that the students made some definite and positive changes. If the program were to start up again, he feels it would be useful to find an instrument that would lend itself to measuring and describing what is going on in affective realms. Rounsaville comments,

> The teacher's dilemma has been to describe what she is doing--how can she show that the child is learning because of her teaching? Everyone is eager to demonstrate his/her presence, but our program doesn't lend itself to that. The reason that the program worked well was because of the teachers.

The Future

Of the original 18 students in the program, 14 of them will enter high school in fall 1973. Because fewer children are entering special education at the primary levels, and so many are leaving Bridge Street to enter high school, the program has been discontinued.

While there has been only a one percent decrease in regular student enrollment in Yuba City, there has been a 20 percent decrease in EMR enrollment. Children now being referred for special education more often come to the teacher's attention because of their behavioral problems than their academic disabilities. With the teachers' disinclination to label a child as handicapped, there have

been fewer children qualifying for the kind of services Earl Perillo provides. Perillo is now working with students at the high school who have recently made the transition from self-contained classes to regular education.

What did this model have to offer that may be of use to others? Even though it has ended, what remains from this approach that might be worth replicating elsewhere? Perhaps its very straightforwardness was the key to this program's success. There are no secrets for success; a lot of hard work and commitment on the part of four teachers, and some solid support from the principal, psychologist, and superintendent. It represents more of a philosophy about how to teach children than a particular technique. And the philosophy allows room for mistakes and even failures.

That one teacher can handle a tremendous range of skills and learning abilities in one room, if he/she has the support of a few people willing to share the problems should be very encouraging to those who believe in integration of the handicapped child, but think they cannot attempt it without extra funding or elaborate teaching designs.

Serving nine elementary schools in a suburban-rural district south of Tacoma, Washington, the Franklin Pierce School District has pooled all special services within the district into an integrated system that acts as a back-up resource to the classroom teacher. All children are assigned to a regular classroom in their attendance area. Individualized programs are designed with the aid of a counselor in each elementary building, with the assistance of a staff of diagnostic teachers. Because the program's staff has been geared to a prevention, as well as a remediation, model they are in the process of transforming their program to comply with the recently revised state regulations which do not provide for prevention services with handicapped monies.

THE FRANKLIN PIERCE PROJECT: A MODEL IN TRANSITION*

To an outsider it appears that the Franklin Pierce School District in Tacoma, Washington, is at an interesting juncture in the life of their experiment with the integration of handicapped children. For the participants--the project staff and counselors--it is a painful period of upheaval and re-assessment of each other and their methods. The goal remains the same as it has been for five years: all involved in the project agree that the exceptional child is better off without the psychiatric label, the self-contained classroom, and with only the company of other handicapped children.

One classroom teacher's attitude is typical of the thinking of many:

> A special education child can't learn what normal behavior is without observing normal children. He won't stretch to match the activities and behavior that are natural to regular classroom children unless he is in an atmosphere where comparable behavior is expected from him.

Terry Fromong, Professor of Psychology at the University of Puget Sound and one of the originators of the program, adds that it's important that segregation of children with special problems be delayed as long as possible, and be limited to only those areas where the handicapping condition prevents adequate social and educational progress.

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The current upheaval, in what appears to be a smoothly run program with a five-year track record and a substantial influence on a number of other school districts, was caused by an up-dating of requirements of fiscal and program accountability mandated by recent state legislation. House Bill 90, passed in 1971 and requiring implementation by 1973, states that the responsibility for providing and funding a handicapped program remains with the local school district. Prevention is clearly a responsibility of the regular system and money earmarked for handicap funds cannot be used to serve children who are not documented as handicapped by the usual traditional psychiatric procedures.

The Assumptions Underlying the Model

The most basic assumptions underlying the design of the Franklin Pierce program are as follows:

1. That every child, regardless of his educational need, is entitled to a relevant educational experience in the school of his own attendance area with his own peer group.
2. That when it becomes evident that a child is experiencing difficulty with his educational program, all educational resources of the district are to be made equally and freely available to him.
3. That when a child is experiencing difficulty within the system, the fault is to be found as much within the system as it is to be found within the child.
4. That traditional psychiatric labels are not prescriptive of educational method and often operate to the detriment of the child by creating the conditions for the self-fulfilling prophesy.
5. That there is nothing magical about what happens in special education classrooms, and the methods and techniques developed for the special child are equally valid for all children.
6. That the special education teacher should be what the label implies, a specialist in human learning and a resource for all teachers and children within the system.
7. That to continue to attempt to solve the educational problems of a system by creating ever more minute subsystems within the regular system (e.g., TR, EMR, ED, etc.) often works to the overall disadvantage

of the system, since continually isolating those children who do not fit into the regular system removes the major incentive for change within the system.

These assumptions, the outgrowth of a three-year research project conducted at the Child Study and Treatment Center, Ft. Steilacoom, Washington (1965-67), under the direction of Daniel Kelleher, furnished the philosophical basis for the reorganization of all special services in the elementary schools of the district.

Brief History

In assisting the Washington State Department of Education to explore alternatives to self-contained special education programs segregated by psychiatric labels, the Franklin Pierce special education department was established as a pilot demonstration-teaching model funded through state excess cost monies. The strategy called for assisting the district in making a transition from a self-contained, segregated program to an integrated, zero-reject model in a three-year period. The three-year period was deemed necessary in order to provide for the necessary inservice training and retraining of existing staff members.

In order to assist the district in making this transition, the state department agreed to relieve the district of the necessity of labeling children, as a condition of making excess cost funds available, and to permit the district to explore a program of prevention in addition to maintaining a program of maintenance and remediation. In return, the district special education staff was to demonstrate that it could provide as good as, if not better than, service to the same number of handicapped children, with no increase in funds--using a zero-reject model.

Fromong says of that time:

> We felt we demonstrated that indeed we were dealing with kids as effectively as we had in a self-contained system. We also felt that we were supplying service to a greatly increased number of marginally handicapped kids. From the beginning we were clearly committed to being a prevention program, rather than a remediation program. The summer preceding our first year of operation we received $25,000 Title VI funds to run a summer institute to train 25 teachers. Most of these came from outside the district. In addition to paying the cost of instruction, this enabled us to purchase $12,000 worth of equipment--12 sets of Sullivan Programmed Materials, 7 Language Master, 6 Sony Tape Recorders, etc. We used a lot of closed-circuit television for training and demonstration. We weren't very knowledgeable about what our needs were going to be. My concern was that our ability to expand the program was always a function of how quickly we could accomplish the necessary inservice training. In addition to just dealing with Franklin Pierce, we also wanted to demonstrate that any district running a reasonably sophisticated special education program (meaning they were making a honest effort to make programs available to handicapped kids), could make a transition to this model with no significant increase in cost. A very key part of the program has been to disseminate as widely as possible what we've found. That's why we set up the summer institutes. Without the closed circuit TV, we would have been seriously hampered in those efforts.

When establishing any innovative program, one of the major limiting factors is the ability to educate all segments of the community so that the objectives are clearly understood and agreed upon. In the first years of the program every effort was made to present the program to the Board of Education, the administrative staff, the PTA, and teachers in all the buildings. The special education staff wanted the excess cost money that was given to the district to have as wide an impact as possible on the entire system. They were beginning to understand that what was good for a handicapped child was essentially no different from what was good for any other child in the system. When they developed materials and procedures that worked with the handicapped, they began to see that these would probably also have general applicability to children in the regular program.

In the first summer institute, three counselors and two diagnostic teachers were trained. The counselor served as the "change agent" primarily responsible for designing a program and arranging an educational environment which would maximize the probability of relevant educational and/or behavioral change occurring.[1]

The counselor-to-be was chosen by the principal from among his existing staff. The only stipulation was that the person chosen be a master teacher who had taught at more than one level. Fromong did not want special education teachers for this role because he felt that if integration was to be the major goal, the focus of training should have its roots in what normal kids did, not what handicapped kids were supposed to do.

The counselor and diagnostic teachers received special training in educational assessment (determining the level and patterns of academic skills and deficits); educational planning (choosing from a variety of materials and approaches a program of sequential steps to lead the child to maximum productivity); behavior analysis (understanding the internal and external factors governing behavior and planning appropriate interventions); administrative problems (relating special education to regular education and exploring the ways in which to integrate the two).

Each summer for three years one-third of the staff, and one-third of the handicapped children (about 30), in one-third of the elementary schools participated in these institutes.

How It Works

The counselor in each elementary building is a member of the building staff and also of the special services team. A counselor first becomes aware that a child is having trouble through a referral from the classroom teacher. The counselor meets with the teacher, parents, and child, either together or at different times, to work out a plan to remediate the problem. Diagnosis of the problem may or may not involve the diagnostic teacher. If the problem cannot be worked out between the counselor and the classroom teacher in either the regular classroom or a resource room, the child is referred to the Diagnostic Center. The staff at the Center attempts to discover why the child is having learning difficulties. When it is determined that either his behavior or his

lack of specific skills are preventing his learning in the classroom, a program is designed for the child to take back to his classroom to develop the needed skills. In the early days of the program, a counselor would take over the teacher's classroom while the teacher came to the Center and worked with the staff until he/she was comfortable with the program. In those days, very few of the regular staff knew anything about programmed materials, or using tape recorders or language masters, or any other hardware. What the staff did was to work with those teachers willing to try these new tools, and then they share information with each other. It was a gradual process, but more and more teachers were willing to try new things. Says Fromong,

> Our stance was that we were just going to do everything possible to make sure that good things happened to the teachers who had handicapped kids. We put every resource we had into making new efforts successful, and we said nothing about that to the rest of the staff in the buildings. Pretty soon, a teacher would say: "Why can't I have a language master?" And we'd say, "Why not?"

One of the major responsibilities of the counselors in the early days was parent public relations. Parents were encouraged to observe; sometimes it was mandatory. Using tightly sequenced programmed instructional materials such as Sullivan Reading Programs, the parents could see the progress their child was making on a daily basis. For the first time in his life, perhaps, a child would bring books home and read to his parents. At every step along the way the parents knew about the problems that the school was experiencing with their child: what had been tried and what other alternatives were available. The parents were a part of the planning process in the early days. Every major change in the child's program necessitated a parent-child-teacher conference. That has not continued in the same degree in the present, due to the time pressures on the counselor.

The Problems

Fromong sees their major difficulty as their inability to come up with an efficient and effective enough inservice training program for the entire staff. The strategy worked reasonably effectively with the key people involved in direct service to the handicapped students, but Fromong has been unable to resolve the curriculum and system changes necessary to incorporate the changes in this program into the whole system. One of the major stumbling blocks has been the difficulty in getting a handle on the inservice training programs of the regular system--to find ways to encourage regular staff to keep informed about what was going on in the program. At the child's level, this split is not felt; the struggle goes on at the building principal, supervisors, and curriculum level.

Another problem--not uncommon to all programs--is that, because of the way special education funds are specifically allocated, probably the kindest thing that can happen to any child in the system is to be identified as handicapped. As special education gets richer, and regular education gets poorer, a lot of new problems are created, one of which is that the demand for services is always directly proportional to the quality of the program. One of the things that has nearly broken this program is that, although they set out to deal with a reasonably hard-core population of handicapped children, agreeing that they would extend their services, as time became available, to marginally handicapped children, the regular system began to view them as a panacea for all problems. At one time they were working with one out of seven or eight children in the elementary program. This was fine for the children; but it took the pressure and incentive for change off the regular education system. As long as special education operates as a safety valve, there are no incentives for changes in inservice training programs, or in the responsibility of the district for education of all the children. The reason for this ranges from state directives about

how money is made available to programs, to how building principals get allocations for staff, etc. At present, the program is simply servicing far more children than even the spirit or the letter of the law would permit. This is what has created the current upheaval in the program.

A final problem, and a major one, according to Fromong, was in the choice of who the building counselor would be. The building counselor was trained as a change agent. Change in any system creates an element of threat and suspicion. In times of threat the tendency is always to look to the past--to how it was--rather than to the future--to how it might be. "One of our major problems and one that we only partially succeeded in was in establishing a climate of trust between the administration, the counselor, and the rest of the special services personnel. Much more work needs to be done in this area."

The Successes

That Franklin Pierce's program has been a success, according to the standards its initiators set, is undisputed. When the state's audit team visited, they were disturbed because they couldn't see a handicapped program. The children were invisible; they had been absorbed into the regular educational system. And that's what the staff had set out to do.

At the end of this fifth program year, all children who had been in self-contained classrooms now have returned to and are maintained in regular classrooms. Children who are referred to the Diagnostic Center return to their classrooms without diagnostic labels or any identification which would serve to separate them from the mainstream of education. All children are potentially candidates for the program, since all children require special attention, and few require an isolated method of rehabilitation.

> At the close of the 1971-72 school year, the impact of the reorganized Special Education program upon the Franklin Pierce elementary schools can be stated as dramatic. At the close of the 1966-67 school year, the last year of the traditional Special Education program, 82 children were

maintained and served by 19.5 full-time equivalent Special Education staff members. At the end of the 1971-72 school year, 22 FTE staff members supplied major educational support to 367 children. This represented 8.6 percent of the total elementary population.[2]

An indicator of outside response to the program can be seen in the number of "compassionate transfers" from the military. If a military family has a handicapped child, and there are no facilities for the education of that child where the family is, then they may apply for a compassionate transfer to a place where there are such facilities. Twenty some children a year come to Franklin Pierce on compassionate transfers.

An insider's view of the program's success is stated by Marie Korsmo, a counselor:

> When I came here I was told not to label or worry about labeling children, but simply to teach the children. And the teachers and I have sort of forgotten about labels; we've dealt with children as they come, with their patterns of weaknesses and strengths. When I first started I felt I had to have my own resource room, but I soon closed that out; so now in my building no child ever leaves his own locale for any kind of program. And any program he has, he does right in his own classroom. There's no pull-outs. I view my role with any of the teachers in the building as a team teacher. These are strong teachers, and we're just teachers together.

Evaluation

The program has been service-oriented from its inception. There have not been funds nor time for hard evaluation or basic research. The research that was necessary related to data for decision making, and most of the data collected were of a descriptive nature related to instructional or system objectives.

> In 1966, a zero-reject model was unique and controversial. The skepticism surrounding the model necessitated some formal evaluation at critical points along the way. The most critical of these times occurred midway through the second year of operation when the district had to commit itself to extending the service to the entire elementary population, or to retaining some self-contained classrooms. At that time, the State Department of Special Education funded a one year part-time research position to assist the district in an evaluation.[3]

This evaluation was completed in 1969 and no further studies have been done.

"...the original objectives were stated as institutional or system objectives." That these have been accomplished at the end of the fifth year of operation is demonstrated by:

1. The lack of any self-contained classrooms that require educating children on a permanent basis outside the mainstream of the regular classroom.

2. The greater numbers of children representing a greater array of academic and behavioral deficiencies served by the regular classroom and supported by the Special Education staff. Significantly, too, with an emphasis on early identification and remediation, the child received assistance without any attachment of a classical psychiatric label.

3. The existence of a vast repertory of individualized instructional materials available not only for Diagnostic and Mini-center use, but available for use by any teacher in the Franklin Pierce system. There also exists a broader array of alternatives available to teachers to meet the individual differences displayed by children in the classroom.

4. The availability of several management alternatives to any elementary teacher. An elementary counselor-interventionist who has received extensive training is readily available to observe and consult with any teacher regarding a variety of educational delivery systems so that exceptional children can be better maintained and understood by the regular classroom teacher.

5. The demonstration by the Special Education staff that large numbers of children, exhibiting a wide spectrum of dysfunctions could be educated on an individualized basis, resulted in many changes in the elementary curriculum. Most significant perhaps is the incorporation of procedures demonstrated as feasible into major components of the district's U.S.O.E. funded Experimental Schools Program.[4]

Conclusion

Whether this program can make the adjustments necessary to the accountability measures required by the state, in a manner that allows them to retain the basic tenets of their philosophy, is at issue right now. How Franklin-Pierce evolves an answer to this problem may well be a sign-post for the future of other special education programs.

FOOTNOTES

1. Fromong, T.D., and Engelsen, L.G. "The Franklin Pierce Project in Special Education, 1967-1972." Mimeo. July 1972, p. 10. Available from the authors.

2. Ibid., p. 15.

3. Ibid., p. 16.

4. Ibid., p. 17-18.

Individualized instruction succeeds where teachers have a multiplicity of skills and an abundance of confidence. They believe they can do it, and they set out to do so, often in spite of past experience or present intuition that discourages their attempts to personalize programs for 30 children.

Where the role of the specialist - be he/she resource teacher, psychologist, speech therapist, diagnostician or social worker - is designed to offer real support to that classroom teacher in his/her efforts to individualize, an atmosphere conducive to change is created. If the specialist brings with him/her new techniques and the desire to share them, the chances for the regular classroom teacher to personalize instruction increase considerably. When the resource people function as a team serving the classroom teacher, combining skills and energy with demonstrable respect for each other and the children, then the needs of all the school people to experience growth in their lives will be met, not only in the classroom but throughout the school building.

For many years, specialization was a hallmark of education for the handicapped. Roles were stringently defined between specialists and generalists, often with the result that a barrier was created between the two. Tensions and ineffective communication resulted where specialized and regular teachers expressed feelings of "my" children and "your" children.

Team teaching, open space schools, peer and cross/age tutoring, and multi-aging of children have helped to break down rigid role definitions and classroom homogeneity. Flexible role definitions and heterogeneous classrooms seem to be of great value as aids to personalizing instruction.

Similarly, programmed learning, precision teaching, behavior modification, and diagnosis and prescription are techniques and strategies that also facilitate planning and carrying out individualized programs for all children and frequently offer useful feedback for evaluation.

These different approaches to individualizing instruction are discussed in the following papers. The first describes a university-based training program at George Washington University that defines the resource teacher as a crisis interventionist, skilled in handling immediate disruptive or traumatic behavior, as well as ongoing, long-term academic disabilities and handicaps. The crisis-resource teacher knows how to model communication between children and teachers and attempts to find alternatives to negative interactions and routines. Although the crisis-resource teacher is only one person, he/she can generate a team situation as classroom teachers become convinced of the value of his/her methods for handling both crises and less dramatic, but daily, problems.

The second paper describes an organizational dilemma. How does one keep track of children who enter a school nowhere near their age-mates in ability level, and who may leave six months later? An elementary school on a military reservation in Fort Lewis, Washington, uses precision teaching, continuous assessment, and team teaching to provide the kinds of experience that will allow each child to pick up skills at exactly the point where he/she is deficient, and progress through the academic tasks at a pace conducive to his/her particular learning style. An organizational system combined with a high degree of adult cooperation provides an impressive picture of individualization under difficult circumstances.

Diagnosis and prescription is a route chosen by many educators who pursue the goal of personalized instruction. In the third setting described, in a school in San Jose, California, a team of three (resource

teacher, learning disability teacher, and speech therapist) work as one to identify, prescribe, implement, and evaluate learning plans for handicapped children. They may pull a child out of the classroom for work, or go into the classroom and work with the child there; they may teach the teacher how to diagnose and prescribe, or they may work up the plan themselves. Each decision is dictated by the specific needs of the child. This paper presents a case study of one child's progress in reading which we think will be of interest, given the priority and stress that our public schools place upon the mastery of reading.

Open space schools have fostered innovation and chaos, experimentation and despair. How a teacher reacts in an open space setting is often a direct result of how well she/he has been prepared to cope with the number of new problems or challenges the physical setting presents. Under good circumstances - where the principal is cognizant of teachers' needs, where teachers are mutually supportive and skillful, and where the children feel encouraged to pursue learning in their own particular fashion - open space schools can be extremely interesting environments. The fourth paper presents such a place, Brigadoon Elementary School. With a differentiated staffing concept, and a low pupil/teacher ratio, pupils receive academic assignments on a contract basis, and move through skill areas with teachers continually assessing their performances. As they meet the specific criteria levels, they advance to new skills; as they advance, their academic performance is chartered by criterion tests and timed samples, and decisions are made about the need for changes in their programs to ensure continual progress for each child. Brigadoon's teachers have found that the contractual process has been the most effective tool for individualization, and the data generated by this program creates the basis that allows them to make relevant program changes based on evaluation data.

The final paper in this section describes a method of mainstreaming in use at Santa Monica, California, that individualizes programs for exceptional students' acquisition of skills and behavior patterns, to ensure their smooth integration and maintenance in the regular classroom. The engineered classroom is a well-known model of behavioral contingency techniques replicated in many schools throughout the country. The teacher in the engineered classroom is a specialist in managing the total classroom environment, and each student within it, to shape behavior and raise skill levels required for regular class attendance. Assuming that all children are at all times ready and able to learn, regardless of their handicaps, the engineered classroom is perhaps one of the more complex designs for mainstreaming, and certainly one of the more controversial in the field. Reactions to the highly structured forms of teacher/pupil interaction vary from enthusiasm to outrage. Dramatic responses aside, the engineered classroom is a significant contribution to successful strategies for mainstreaming.

The role of the resource person is defined in the master's program at George Washington University as one who is skilled in maintaining handicapped children in regular classrooms through use of direct, immediate intervention techniques with children in behavioral or academic trouble, and follow-up consultation with regular classroom teachers to create a strategy for mainstreaming.

CRISIS RESOURCE TRAINING: THE GEORGE WASHINGTON UNIVERSITY*.

Merle Van Dyke, Director of the Crisis-Resource Teacher (CRT) Model Research Project, and Assistant Professor of Special Education at George Washington University, describes the qualities he seeks in a candidate for a master's degree in the CRT program:

> I look for someone hungry for change; someone with a high physical and psychic energy level; someone who tends to live a relatively open life and who faces problems directly, an experienced teacher with a reputation for individualizing instruction within the classroom. Then we lay on a heavy dose of training to reinforce these qualities. We use a great deal of questioning, sensitivity training, and self-examination.

With emphasis always on the human interactions, the program trains CRTs in the necessary skills to serve an entire school population, i.e., diagnosing and remediating learning difficulties; choosing relevant teaching materials; practicing parent counseling and family dynamics; knowing how to apply the principles and practices of behavior modification and contingency management; and understanding systems theory and practice as it relates to the public school system.

The range of services that the CRT offers to children, teachers, and administrators emphasizes "direct, immediate intervention service to children who, at any given moment in time, experience academic and/or behavioral difficulty."[1]

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> The crisis teacher program is designed to give this periodic, limited help to a child at those specific times in the child's school life space when his/her needs are such that some extra (to the regular classroom program) resource is indicated. For some children this extra support may be needed for only a 10-minute period of time; for others, the time necessary may be an hour or two, or perhaps the remainder of the school day. On rare occasions, the child may need the services of the crisis teacher for two or three days; however, it must be realized that no child is "placed" in a crisis program because at that point the program is no longer doing what it is designed to do, i.e., to give temporary, periodic help to troubled children only for the duration of time when this extra help is needed.[2]

Within the network of mainstreaming the role of the resource teacher is identified as critical, but his/her particular duties are often left purposefully flexible. In this training program the resource role is highlighted as a specific dynamic function that exists to produce "change in general educational practices, particularly as they relate to meeting the special needs of any and all children regardless of how those children may be categorized."[3]

CRT Training

Mary Campbell is Acting Coordinator of the 1973 program while Van Dyke is on leave to the District of Columbia as assistant superintendent of special education. She explains that since the CRT does not want to pull the child out of the classroom, but does want to give aid to children with specific problems, each CRT defines what it is she/he does or does not do, in the following terms: 1. Does what I'm doing allow the child to stay in the regular classroom? 2. Does it change the regular classroom so that the child can profit from it? Says Ms. Campbell:

> We try all kinds of ways to effect this--a diagnosis and prescription if that's what's necessary, a tutoring session, if that's necessary, or sometimes we'll work with a child to approach a teacher, so that the teacher will be willing to cooperate with us in a crisis situation. We believe that crisis is the best time to begin changing things, because that's the time you can intervene most effectively.

What is meant here is that often those teachers who have not wanted to work with CRTs become much more supportive if help can be given to them in even a single crisis situation.

Training approximately 28 full-time students per year at George Washington

to intervene effectively consists of 33 semester hours of course work and practicum experience. Course work involves seminars and small-group discussions (there are no large lectures) in educational programming for children with behavior problems. A basic course is described in the following terms:

> ...ecological considerations of the child in the school setting: examination of historical and contemporary models in special education; family dynamics and role theory; communicated expectations and the behavior of children; self-concept and its educational significance. [One course emphasizes] clinical teaching of problem children and offers instruction in planning educational programs for special education children in regular classrooms. [Another course offers] psychoeducational diagnosis of children with learning and behavioral difficulties, [and deals with] research methods and procedures and the interpersonal dynamics in special education.

There are also group discussion courses designed to increase the students' self-awareness and their sensitivity in relating to others.

The first semester the student works 25 hours a week in a public school with a CRT. She/he is observed weekly by a member of the university staff and she/he meets weekly in small-group seminars to discuss experiences with fellow students. The second semester, the student will spend the entire work day in a public school, either setting up a crisis resource program, or working alongside of a graduate of the program. Seminars are held again after the elementary school hours for the purpose of discussion and problem solving. Diagnosis, assessment, and remediation experience is also gained through work at the Child Study Center at George Washington. Children throughout the D.C. area are referred to this center for learning problems, and the CRT student is assigned one child for whom she/he designs an educational remediation plan. The student can take as long as necessary to establish a plan that works for that child.

The CRT Within the School

The schools in which a CRT trains and works are often characterized by a high degree of transiency and behavioral problems among the children. The number of one-parent families is high, and, for the most part, communication between the

school and the home is not good. Philip Benincasa has been principal at Silver Hill Elementary School, Prince George County, Maryland, for three years. In fall, 1973, the school changed from a 12 percent to 38 percent black population, due to boundary changes drawn to effect racial integration; 174 white children left the school, and 90 new black students entered. The school population had been traditionally middle-class, as were the teachers. In the first two months, Benincasa changed programs five times in an attempt to alleviate the severe problems occurring as a result of teachers and children "engaging in a test of wills that did neither group any good." Nancy Gibson, the CRT at this school, spent much time at the beginning of the year putting an entire sixth-grade class on a behavior modification schedule. Ms. Gibson says:

> I would have seen the same ten kids in my resource room every day from that one class, if we hadn't decided to reorganize the entire classroom. After several months we were able to replace a token reinforcement schedule with verbal reinforcement.

Benincasa says that the implementation of this technique made a dramatic difference in that classroom.

> Where Nancy has had cooperation from the classroom teacher, the amount of classroom turmoil has been virtually eliminated.

But he also adds:

> The problems have been so massive here that the full impact of the CRT hasn't been felt. She offers help and those teachers who are receptive have grabbed for that help; those who don't, pay such an emotional price (in terms of trying to solve all their problems alone), that they, too, eventually come around.

Ms. Gibson's presence has also helped those teachers who wouldn't report problems because they saw that as admission of failure on their part to handle their classrooms. Now, they feel freer to admit mistakes. The greatest strength of the George Washington program, as Benincasa sees it, is in their initial screening process; most CRTs are mature people with teaching experience.

The daily work of a CRT will vary as the needs of the school population demand. The crisis-resource room is centrally located in the school building

so that it is easily accessible to all children. The nature of the CRT's role of always being available results in many children seeking out the CRT--during recess, at lunchtime, or for "reward" after work in their regular classrooms. No children are regularly scheduled to the room, although the CRT may see some children on a somewhat regular basis for a short period of time.

Nancy Gibson's daily work begins by looking at a child within the total school framework and by helping the teacher to view the child that way.

> Before my CRT training, I used to trust that the classroom teacher knew what was best for the child. But often teachers have just as much to learn as children, and they can't really tell you what's wrong. So I test and observe a child to arrive at an evaluation of the problem, and then I plan daily or weekly lessons for the child, if the teacher doesn't know how to do this. Gradually, the teacher will take over making worksheets, writing daily or weekly objectives, and evaluation forms. I tailor all my suggestions to the goal of working with the teacher.

At Glenallen Elementary School in Montgomery County, Maryland, 70 percent of the children have one-parent families, and many live in a low-middle income housing project. The transient population causes much frustration to the principal and teachers who are trying to provide the children with a place to work out some of their problems, in addition to acquiring the basic skills they need. Kandi Hutman, CRT at Glenallen, was a classroom teacher for five years before returning to graduate school at George Washington University. She had become increasingly dissatisfied with her own lack of growth and her isolation from other adults during the normal school day. At George Washington she says she was,

> ...thoroughly soaked in the philosophy, and came away with real skills in analyzing problems. Because of the ideas I suggest and the approaches that I take, I can give teachers many more alternatives in any crisis or learning situation.

Kandi Hutman will have a student intern from George Washington in the fall to help her with the substantial number of crises and daily problems she will face. The intern also will become a confidant, because Ms. Hutman realizes the importance of not establishing alliances with the several teachers and other specialists in the building. The CRT can experience loneliness and isolation if the school setting

is a difficult one, and she/he has to maintain a position of availibility to everyone and intimacy with no one.

A teacher at Glenallen described her impression of the way Ms. Hutman works:

> Kandi tries to help teachers understand that there are different ways of dealing with children so that they experience success. To be truly effective in this role, you can't have allies in the school - that would alienate some of the staff. It's important to know the informal power structures in the school, and to be comfortable with the knowledge that you won't have all the answers.

Fanchon Silberstein is the CRT at Thomas Jefferson Elementary School in Falls Church, Virginia. This is a four-school system in an affluent white middle-class area that does not experience the high student transiency rate of some neighboring communities. The staff turnover is small, and the teachers are encouraged to visit in each others' classrooms and in other schools. The principal, librarian, or physical education teacher take over classrooms so that the teachers are free to do this. The staff is organized in teams; the leaders of the teams meet with the principal once a week to share ideas and decisions. Ms. Silberstein is also present at these meetings and uses the time to talk to the teachers about general ideas and plans.

> We try to provide a positive environment and I encourage people to keep talking until they begin to see how they can solve their own problems. What the teacher does has everything to do with how a child behaves.

Ms. Silberstein's room is set up as a reward situation, as is Ms. Hutman's. Every day at recess it's open to a different classroom to use for games, drawing, painting, etc. There is a "feeling wall" where children are encouraged to write about things they like, or feel strongly about. The room also serves as a cooling-out place for children who need some time out from the regular classroom -- a place to be quiet for a few minutes, or to be with an adult and receive her/his total attention.

A fifth-sixth grade teacher at Thomas Jefferson comments:

I'm extremely supportive of the CRT program because I've seen it work well. I use it in a crises when I have to get a child out of the room. It lets the child cool-out when he's not feeling OK, and helps me to calm down. I also use Fanchon as a resource when I don't know what to do. I feel like I'm working as a team then. Fanchon's built up a rapport with kids; they know she'll be fair and that she'll listen to them, but that they can't play her against their classroom teacher. And she's very flexible about receiving kids. Sometimes there just isn't time to write a note explaining why I'm sending a kid down to her, and I appreciate the fact that she's flexible about that.

An evaluation of the CRT program at George Washington University finds that:

> ...if maximal benefit is to be realized by the child, there must be continuous dialogue among all professionals concerned with the child's welfare. We feel so strongly about this point that we suggest to most schools who are setting up this kind of program that they build in a rule that says that the crisis teacher and the regular classroom teacher must communicate with each other before the end of the day (or the beginning of the next school day) about the children who have been referred to the crisis program.[4]

Evaluation Procedures

Evaluation of the training program is based on 13 goals. Methods used to ascertain students' achievement of these goals include a self-concept scale, pre-post training data collection, independent ratings by university staff and school-based supervisors, faculty constructed achievement tests, and students' anecdotal self-reports. Additionally, evaluation of the model is conducted by a pre-post design that measures a school's procedures concerning handicapped children before and after the introduction of the CRT model.

"The goals of the CRT training program and the proposed method of measurement/evaluation of each goal are as follows:[5]

Goals	Evaluation Methods
1. To produce a rise in the self-concept and feelings-of-adequacy-and-personal worth of each student.	1) Tennessee Self Concept Scale, 2) Independent judgment of university staff responsible for student advisement, courses of instruction, and practicum supervision. Pre- and post-training data collections. 3) Students will submit anecdotal self-reports on prescribed dimensions relating to self-concept. Pre-and post-training data collections.

2. To produce positive growth in the perceptivity of the student relative to dynamic psycho-educational data on children experiencing difficulty in the teaching/learning process.	1) Independent rating of university staff, practicum supervisors, and practicum supervising teachers. Pre- and post-training data collections. 2) Students will devise an educational program based on a behavioral description of a child demonstrating the ability to collect, integrate and interpret psycho-educational data on a child. Pre- and post-training data collection.
3. To produce interpersonal skills in life space interviewing and other interpersonal interactions with emotionally disturbed and children with behavorial problems.	1) Independent ratings by university staff and practicum supervisors. 2) Independent ratings by practicum supervising teachers. 3) Achievement testing on the principles of life space interviewing. Pre- and post-training data collection.
4. To produce knowledge of curriculum at elementary and junior high levels and an understanding of the rationale that places certain skills at specific developmental levels.	1) Student must set up reading and arithmetic curriculum at 1st, 3rd, and 6th grades demonstrating appropriate sequential curricular tasks. Pre- and post-training data collections.
5. To produce skills to diagnose and remediate learning difficulties.	Each student will be responsible for working individually with a child over time in the Special Education Child Study Center located in the Department of Special Education. Biweekly progress and difficulties will be written anecdotally by the student and project staff.
6. To produce mastery of curriculum at the level the student chooses to work.	Student will engage in appropriate tasks in conjunction with the Instructional Materials Center requiring written reports on this dimension.
7. To produce skills needed in the creative manipulation of existing services of a given school or system for purposes of meeting individual needs of emotionally disturbed children.	Student is involved in practicum experiences on a year-long basis in a public school. Monthly written anecdotal reports on this dimension will be submitted by student and practicum supervisor articulating strengths and weaknesses over time.
8. To produce working familiarity with existing and historical models of special education.	Faculty constructed achievement test administered with pre- and post-training data collection.

9.	To produce working knowledge of teaching materials and media relevant to the student's chosen level.	Student will submit monthly written report on new materials and media about which he has learned; reports must demonstrate that the student has working knowledge of how to use the materials and media reported. (The Department of Special Education houses a funded Special Education IMC/RMC in the same building as the Special Education Child Study Center: in addition the School of Education IMC is housed in the same facility as the SEIMC.)
10.	To produce knowledge and skills in the theory and practice of parent counseling and family dynamics.	1) Faculty constructed achievement test on the theory and techniques of parent counseling and family dynamics. Pre- and post-training data collection. 2) Each student will be assigned experiences in parent counseling-usually with the parents of a child with whom the student is working in his practicum assignment. Student will submit taped reports following each session which will be evaluated by university practicum supervisors.
11.	To produce a working knowledge of system theory and practice as it relates to the public school system: particular emphasis is on the production of positive change in the culture of the school.	1) Faculty constructed achievement test on the theory and principles of change production. Pre- and post-training data collection. 2) Each student will be assigned to year-long practicum experiences. Monthly anecdotal reports will be written by student on this dimension relative to student strengths and weaknesses. 3) Specific positive changes in the system of the school to which the student is assigned, and which are attributable to the student's work will be accounted for by the master teacher with whom the student works.
12.	To produce consultative, inservice training skills which the student can use in process over time with regular classroom teachers, administrators, etc., in the student's follow-up work with the source of referral of a problematic child.	1) Faculty constructed achievement test on the theory and practice of consultation skills in public schools. Pre- and post-training data collection. 2) Written monthly anecdotal reports by the student detailing the student's strengths and weaknesses on this dimension.

13.	To produce working knowledge of the principles and practices of behavior modification/contingency management theory and practice.	1) Faculty constructed achievement test on this dimension. Pre- and post-training data collection. 2) Written anecdotal reports to be submitted at the end of the 1st and 2nd semester on this dimension by the student and university practicum supervisor detailing strengths and weaknesses in the student's procedures.

The Future

The CRT program will graduate 28 students in 1973. Some of them may not assume jobs as CRTs, but may become assistant principals or regular classroom teachers instead. Van Dyke does not count this as a loss since the role of assistant principal is often one directly responsible for dealing with behavioral problems. With training in CRT, a graduate can spread the philosophy as well as implement the concepts as either assistant principal, or classroom teacher.

The program is not likely to expand greatly at George Washington. Van Dyke says:

> We couldn't expand and still keep the variables controlled. I feel that the model is generalized, but no one does it the same way we do. I now want a modular curriculum design that allows us to work on specific areas better. We will move to a performance, competency-based training, and most of the thinking and planning for this is already done.

FOOTNOTES

1. Crisis-Resource Teacher Training Program, Fiscal Year 1971. Final Report, The George Washington University, Department of Special Education. p. IV.

2. Van Dyke, M.G. The Crisis-Resource Teacher for Behaviorally Problemed Children. Mimeo. The George Washington University, Department of Special Education, March, 1968, p. 2.

3. Final Report, op cit., p. IV.

4. Van Dyke, op cit., p. 3.

5. Evaluation of the Crisis-Resource Teacher (CRT) MA Level Training Program. Mimeo. The George Washington University, Department of Special Education.

Teacher-developed assessment packages enable the staff at an elementary school in Washington to devise an individualized program for all students. Continuous assessment measures are used to maintain close supervision of students' skill acquisition, and extensive use of peer tutoring creates an atmosphere free of stigma for the large numbers of children who are functioning below grade level due to continuous transfers of their military families.

PARKWAY ELEMENTARY SCHOOL: ORGANIZATION FOR INDIVIDUALIZATION*

> The integration of mildly handicapped children into the mainstream of public education is not one of our objectives. It happens, and we're aware that it happens, but it's not the focus of this program--it's just tangential. An educational approach that assumes children function at many different learning levels can accommodate handicapped students without even focusing on that goal.

So speaks Don Ellis, who has directed his energies toward instituting a program with a place for every child, during his nine years as principal of Parkway Elementary School.

Parkway Elementary School is located on a military reservation south of Tacoma, Washington. There are about 400 children in this school and every one of them has a father who is an Army sergeant. They travel a good deal; the turnover rate in the school from September through June is about 55 percent. These youngsters have attended school all over the world, and the diversity of achievement within one age grouping is remarkable. If these children were given some intellectual assessment tests, Ellis speculates that a sizable portion of them would fall into a subnormal category. But rather than administering tests and categorizing the children according to standard assessment measures, Don Ellis made some specific decisions about the competencies he wanted the children to acquire. Since some of these children come to Parkway with gross basic skill dysfunctions, the first instructional areas to be focused on are language (reading and phonics, which is taught as a separate skill), math (computational and modern math skills), handwriting, creative writing, and

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spelling. This takes up a little over half of the school day, which is very structured. The few hours that are left are tagged for freer, more creative, less structured activities.

In each basic skill area, the staff set up their objectives and the learning sequences required to meet those objectives, and they established assessment packages to test achievement at each level of the sequences. They used both commercial materials which they adapted to their needs, or they wrote their own materials to transmit each step of the sequence. And they instituted the evaluation procedure of continuous measurement. Says Ellis,

> I invented a display that children can use themselves. Every child in the school, from first grade on, charts his own responses in the basic skills. It takes two 10- to 15-minute sessions to teach them how to do it. The chart is theirs--it doesn't belong to some adult, it stays with them. This doesn't mean the children set their own goals. They have some choices--they can choose how to learn the vocabulary (with a peer, to use language master cards, or other alternate ways), but they don't have a choice whether they're going to learn the vocabulary or not.
>
> It takes some children a very short period of time to master a skill, and some take a very long time. We don't get excited about that as long as the data show that we're getting movement in the proper direction for the individual, and that our overall efficiency is better than it was under previous systems. We have the baseline from previous years to indicate this.

The school is organized into four teams, three are instructional and one is a support team, which consists of all the itinerate personnel, including a counselor who is trained along the interventionist model. One instructional team can serve the full range of grade levels in the school. Designation of grade levels are used only as a help to parents. Ellis doesn't want to have to spend a lot of his time explaining why he doesn't have a third grade. It doesn't make any difference to him what those labels are, only the functional progress of the youngster is important. Each teacher team may be composed of from three to six staff members (K, 1, 4, 6th grade levels, for example), and one aide. Children are assigned throughout the school in the skill areas--

one level may have three teachers if that's where a lot of children are, or one teacher may have three levels if there are fewer children there. Children are not just assigned to teams, but to individual instructors within each team. These are very mobile; 50-60 children a day move from level to level. If one team gets loaded up with children, a number of aides will be moved to help them.

The first week of each school year is spent in doing assessments in each of the basic skill areas. During this time, the children learn how to use a contract, how to do their own charting, how to take a timing, and the generalized classroom management techniques that are standardized throughout the school. Ellis explains,

> You can't have children moving from room to room with the classroom rules constantly changing--so all those techniques are standardized throughout the school. The children are assessed and placed in their initial group. The assessments are usually 10-20 percent inaccurate. We take care of the inaccuracies by letting children challenge out or, if they don't make it, we reassign them to a lower level. New children who enroll during the year are given the orientation and assessment and placement on their first day.

An example of an assessment kit in phonics allows the assessor to give the child a one-minute test from the simplest to the most complex levels (vocalizing letter names, saying sounds, shaping vowels, consonants, blends and digraphs, dipthongs, irregular sounds, syllabication, and testing advanced phonetic rules). In the simpler levels the child must get 30 letters or sounds correct, with no more than two errors, in a one-minute testing in order to pass to the next level.

Because the students arrive with such a wide range of competencies, it is not unusual to see an 11-year-old child and an eight-year-old working at the same level. There's a great deal of peer instruction. For example, when a child finishes the last level in phonics, he/she is trained by a counselor to instruct other children two or three periods a week. Many of the instructional

materials are set up for peer instruction.

This is the first year that Parkway has been formally organized with a team teaching structure. Although they have always had a lot of trading off of children, they haven't had this amount of movement before among the children. To prepare the teachers for this structure, they held two one-week workshops during the summer, where everyone developed more instructional materials. What were teachers' attitudes toward moving to team teaching? Ellis says they arrived at a consensus that this was what they wanted to do. Each individual teacher was given the option to continue at Parkway, or to be transferred with honor to another school. No one chose to be transferred; everyone signed a written commitment to the program.

Parkway is a traditional, older school. No walls have been removed, but the halls are completely carpeted, which allows 10 percent more instructional space. Children move easily between the classrooms and the hall, and during the four instructional periods every morning they move to different classrooms for reading (one hour), handwriting (20 minutes), phonics (40 minutes), and math (45 minutes). The afternoon is spent in their homerooms in larger-group activities, such as art, music, social studies, and physical education.

The teachers may see up to 120 children a day, and for this reason most of them are very pleased with the continuous assessment procedures which allow them to know each day where each child stands in specific skill areas. Furthermore, the criteria for passing from one work sheet, or reading level, to another is clearly defined - the children know what the standards are and they don't feel that the teacher is imposing new standards arbitrarily.

One of the most noticeable characteristics of a classroom at Parkway is the amount of informal, as well as formal, tutoring that goes on between the children. They test each other on their daily work before being "officially" timed and tested by the teacher. And they feel tremendously pleased when

someone they've just helped passes his/her test. When the children have completed their work and need a timing or a checking for accuracy, they ask the teacher for a "conference." She spends a few minutes with them and is ready for the next child after she's told them what to move on to, or what to redo until it's right. An aide also moves around the room helping children who are having trouble completing their work. One of the teachers comments on the teaching procedures:

> We're not precision teachers. What we're doing is teaching on an individualized basis using some precision techniques. We've pretty much evolved and developed what we're doing by ourselves. I think it's better than anything I've ever done in the past. It reaches more students, and I feel more comfortable knowing just where they are at.

Prominent in every classroom is a wall-size bookcase containing work sheets from levels 1 - 13 in each skill area. Related to the development of some of these materials is "Program Project," funded by National Institute of Education under Title III for five years, to help teachers handle the wider range of students that will be turning up in the classrooms as a result of Washington's House Bill 90. By 1973, special education will only be responsible for the very deviant, and regular education will have to accommodate a larger ability range than they've been responsible for in the past. Program Project, based at the University of Washington in Seattle, is designed to integrate mildly and multiply handicapped children into the educational mainstream as much as possible. There are four teams doing basic research on instructional materials, programming for severely retarded children, and setting up prototypic models on how to teach these children without having to put a teacher through a whole new training scheme to learn how to work with them.

The field component team is at Parkway. They write and test instructional materials that will help the integration of handicapped children into the regular classroom. They write packages of directions, materials, evaluation devices, and instruction on how to manage a classroom that will enable the

teacher to individualize instruction. The teacher should be able to set up a self-managing classroom without any extra training by using these packages. This first year the staff is writing the phonics packages. Next year they will then be doing reading, the following years they will be working on spelling, creative writing, and handwriting. Parkway is the initial test site for the materials, and this is the first year of the project.

Evaluation

Evaluation data on student outcomes are presently being collected. No published evaluation report is available at this time. However, some of the student data on reading skills and phonics have been made available. These are in the form of frequency counts of students in phonics and reading series from September 1972 to March 1973. Despite a large attrition rate (33 percent since September) due to a transient student population, the data indicate that students are advancing into more difficult texts of phonics and reading series adopted by Parkway.

A teacher's viewpoint of diagnosis and prescription is presented. Mr. Chimento describes his experiences as one of a team who have chosen this method for personalizing instruction.

DIAGNOSIS AND PRESCRIPTION: A ROUTE TO INDIVIDUALIZATION

Sam Chimento*

Oak Grove School District, San Jose, California

Learning is a communication process. It involves input, processing for meaningful association, and output. The basis for all learning is experience. Experience results from the interaction between the individual and his environment. As Charles Rathbone put it,

> Learning is...the result of [the student's] own self-initiated interaction with the world. [1]

These interactions always overlap and are never discrete sets of behavior, but for clarity's sake they can be studied separately. Input refers to sensory intake, i.e., the sights, sounds, touch, tastes, and smells of environmental stimuli. Output is usually some form of verbal expression or gesture. In learning what to express, each of us refers to previous perceptual experiences that have already been internalized. Perception is the internalized processing of sensory intake for meaningful association. It is also the key to recognizing that learning is always an individual experience.

Knowing this, it follows that the more individualized the school environment is, the more meaningful it will be to the learner. We must create a student-centered environment (based on what we know about how the student perceives) in order for the communication process between student and his learning environment to operate at its optimum level.

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We believe the diagnostic/prescriptive teaching process is, at present, the best alternative available to educators to individualize education. The diagnostic/prescriptive strategy is a collective strategy that emphasizes learning as an individual experience. It is in effect a problem-solving strategy, which seeks to identify all possible resources, and then determine when and how to use them most effectively. It is a strategy that allows for diversity, even deviance, for it enables teachers to identify where a learner is in relation to where the teacher would have him be, and to plan on how to get him there.

The "where" in the preceeding statement refers to educational goals. The origin of these goals may and probably should rest in the community. The "how" refers to the strategies.

An excellent articulation of the difference between goals and strategies can be found in the Educational Goals Study conducted by the Oak Grove School District in San Jose, California. The District defined goals as community established priorities, and strategies as the teacher-developed means to reach those goals. A community-wide survey was conducted to establish educational goals.[2] The results of this survey were presented to district personnel who then became responsible for developing strategies to achieve these goals. One goal selected by the community was personal discipline and moral integrity. This was further defined by goal indicator statements. For example, some of the indicators of personal discipline and moral integrity were:

> 1) to have the courage to accept challenges, 2) to understand the difference between fairness and unfairness, 3) to have a personal set of values and a sense of responsibility to those values.[3]

The goal and indicator statements were presented to the teachers, who then undertook the responsibility of translating them into performance criteria relevant to their students' needs and experiences. The teachers were responsible for developing a strategy that would provide the student with the necessary experiences to gain the skills identified in the performance criteria.

Blossom Valley School is a K-6 school in the Oak Grove School District of San Jose. The school opened on March 1, 1971, and is a circular building that employs the open space concept with maximum flexibility through the use of movable partitions. It also contains a centralized multi-media resource area. The school staff is organized into teaching teams arranged according to grade level and a 30:1 ratio of students to teachers, so that a grade of 120 students is taught by a team of four teachers.

Diagnostic/Prescriptive Strategy

We think most people will agree that the strategy is logical. It is a strategy that says "What do you want to happen?" "To whom do you want it to happen?" "How can it happen most effectively?" and finally, "Did it happen? If not, why? And what now is the most effective way to make it happen?" The diagnostic/prescriptive teaching strategy can be simply described as having four essential elements which are sequential and repetitive in nature. They are: diagnosis, prescription, implementation, and evaluation.

An adequate diagnosis includes: 1) an assessment of the student's strengths and weaknesses in various sensory modalities, i.e., visual and auditory perceptions, his expressive ability as evidenced by his motor integration, and assessment of how these strengths and weaknesses relate to school goals and performance criteria; 2) a general statement of school goals stated in terms of performance criteria, i.e., the child will learn to read and must first master sound-symbol relationships to do so; and 3) an inventory and analysis of all teaching tools, i.e., "personpower," materials, and physical environment.

Diagnosis does not always require sophisticated testing procedures, and such testing, if used, should be related to classroom behavior. Much diagnosis can be accomplished by teacher observation. Assessment of student learning styles need not be done before planning for every instructional objective. In fact, student profiles established early in the school experience may be sufficient in many cases.

The prescriptive element of the strategy calls for matching the assessments and analyses made in the diagnosis with the appropriate tools and resources available. It is the teacher's skill at selecting the appropriate resources and organizing them in an instructive fashion that results in the optimum learning environment for each child.

Implementation is accomplished by arranging the physical environment as determined by the prescription, and by the management and distribution of environmental components, i.e., personpower and materials. It also involves observing and perhaps monitoring the interaction between the student and the prescribed learning environment.

Evaluation calls for techniques, or instruments, used to determine whether the learner can perform successfully the criteria specified in the diagnosis. If these criteria are met, the entire process is repeated. If these criteria are not met, the learner is rediagnosed, and an updated prescription is drawn.

Case Study

The following is a case study of a diagnostic/prescriptive strategy that was used in conjunction with the goal of reading.

Frank is a third-grade student who had not progressed in reading beyond the primer level. The third-grade teacher discussed Frank's reading problem with the Learning Disability (L.D.) teacher. Based on the classroom teacher's observations that Frank 1) often lost his place while reading; 2) confused the letters, i, e, b, and d, p, and q; 3) read words in reverse (was as saw), the L.D. teacher suggested a thorough analysis of Frank's perceptual processing abilities in the auditory and visual modalities. The speech therapist tested Frank's ability to discriminate auditory stimuli, remember sounds, remember sequence of sounds, and blend sounds together. The L.D. teacher tested Frank's

ability to establish and maintain a left-to-right eye motor movement, remember visual sequences, discriminate visual stimuli, remember visual stimuli, recognize spatial relationships and positions in space. All of these tests were administered to identify possible disabilities related to the observations of the teacher.

The results showed Frank had adequate ability in all of the auditory areas tested, but there were significant disabilities in his visual perception. Frank had not established firmly an awareness of left and right, which prevented him from consistently establishing a left-to-right eye movement, thus causing him to lose his place when reading, reverse the sequence of letters in words, and to perceive the incorrect position in space for letters that could be reversed without a left/right awareness. This diagnosis resulted in the L.D. teacher suggesting that the classroom teacher include the following in her programming for Frank:

1. Mark an X on the top left corner of Frank's papers and reading material to orient him as to "where to start."
2. Provide Frank with a place marker to help him maintain his place on the page.
3. Whenever possible, give instructions with an emphasis on left/right awareness, i.e., "Frank, get the pencil on the right side of my desk; Frank, get the eraser from the left side of the chalkboard."
4. Allow Frank to be included in a L.D. group to obtain specific training, and work with materials specifically designed to establish left/right awareness and position in space.

The implementation of the suggestions made followed conferences with the L.D. teacher, the classroom teacher, and the parents. The disabilities and suggested prescription were explained. The parents were asked not to place any unnecessary stress on Frank at home, by giving him tasks related to his disability. They were also asked to positively reinforce Frank in all his successes to help build his self-confidence and self-image.

Frank was included in an L.D. group for two hours a day for two-thirds of the school year, and provided with specific training related to position in space, left/right awareness and visual tracking. In all training, direct correlations were established with skills required for reading. The classroom teacher did orient Frank through the use of an X on his papers and did emphasize left/right whenever possible.

Frank finished the year reading in a 2.1 basal reader. Teacher observation included noticeable differences in written work in regard to spatial arrangement and legibility.

Frank's performance in math has been excluded in the above report, as we wanted to specifically relate to the goal of reading. He was also functioning significantly below grade level in math, and the diagnostic/prescriptive application discussed above included prescriptions designed to remediate the deficiency in math. Frank finished the year successfully demonstrating how to add, including carrying, how to subtract, including borrowing, and multiplying to the 9's table.

Implications for Change - Redefining Personnel Functions

As already stated, we believe learning is a communication process based on the interaction between the learner and his environment. Here we identify the student as the learner and the classroom as the environment. The arrangement of the environment and its contents are determined by a variety of conditions, physical limitations, human capabilities, etc. One variable found in every classroom environment is the classroom teacher. Typically, the classroom teacher is assigned sole responsibility for the academic achievement of approximately 30 students, and has varying degrees of autonomy to accomplish that task. In light of this, how can a regular classroom teacher teach 30 students, some of whom are "exceptional," and provide individualized programs for all?

Most teacher training programs give little or no training in coping with the problems attendant on individualized instruction. We are not denying familiarity with or exposure to the concepts and terminology related to individualization, but that does not constitute training.

There are far too many teacher preparation programs that fail to provide necessary experiences. They appear to be isolated from the schools, and apparently lack the expertise regarding the practical application of theory that schools badly need. There are far too many teachers willing to state that their college preparation was inadequate when they entered the field.

We would like to recommend the development of cooperative planning between school districts and universities to provide future teachers practical experiences. This should go far beyond current student-teacher programs in that school districts would have a voice in planning the kinds of experiences student teachers would have. This would be advantageous to the district, because it would provide a constant supply of qualified personpower, and access to current trends in theory.

More emphasis should be placed on management, organizational, and communication processes, particularly as they relate to individualized instruction. Classrooms at the university level should be models for effective learning environments. The lecturing method so common to many universities is antithetical to the individualized instruction processes. The cliche, "Do as I say and not as I do," is particularly reprehensible in professional training programs.

In most elementary school classrooms the constructs of the learning environment are still heavily influenced by the teacher's feelings of aloneness, sole responsibility for student achievement, and security in the traditional teaching strategies. The motivation to individualize instruction, because of a weekend's inservice experience, fades quickly Monday morning when the classroom fills up with 30 students. It is easy to see why teachers retreat to those familiar

techniques and strategies with which they feel most secure. And those strategies do result in learning environments that range from highly individualized in nature, to programs that contain no individualized learning experiences. The vast majority of classroom environments fall somewhere in the middle. This range is as identifiable within a school as it is between schools.

When discussing diagnostic/prescriptive teaching with staff members at Blossom Valley, we asked "What problems does a teacher face in trying to apply the strategy in each situation?" The answers included:

I've never been trained.

It's trial and error, but you learn more about how to do it all the time.

Materials--we need lots of materials.

Keeping track of who goes where.

Time to diagnose.

Trying to maintain the sequence.

You need a 5 to 1 ratio to do it.

There isn't enough time.

What about standards.

How do you know how well we're doing in comparison with the rest of the country?

To those teachers who had made the greatest effort to individualize, we asked the question, "How are you doing it?" Answers included:

We really go after parent helpers.

We use our paid aide/differentiated staffing concept.

The resource center really helps us in our prescriptions.

Sheryl [the resource teacher]! She says, "Just write down the skill," and she plugs them in.

Having you [L.D. teacher] and Ruth-Ann [speech therapist] in the building to help with diagnosis and provide for special programs.

It appears the major challenge for regular classroom teachers to learn to individualize instruction is related to a new organizational concept. It means learning how to effectively seek out, organize, and manage new materials, personpower, and teaching techniques to enhance utilization of the diagnostic/prescriptive process.

The first grade team at Blossom Valley demonstrated how these new teacher skills can have an impact on program development. For a portion of each day they employed a variety of strategies to reduce student groupings to approximately one-half the normal 30 to 1 ratio. During this time, the first-grade team of four teachers organized their students into seven groups for the purpose of implementing prescriptions designed to meet the needs of individual children. One group was sent to the resource center, which made available small-group or individual instruction in art, visual perception, auditory perception, reading, language arts, math, or science. A second group was programed to work with a parent aide, who was provided with prepared materials and specific instructions or training in their use. A third group was assigned to a resource area set-up within a classroom with appropriately prepared materials. The remaining four groups were each assigned to a teacher for prescriptive activities in movement exploration, science, phonics, or dramatics.

In organizing this program the teachers prescribed the activities for each group at each location. They rotated groups through each location in a pattern that allowed each student to work at each location weekly. Record keeping was done by use of a teacher-made profile chart identifying location assignment and specific prescription to be implemented.

When examining the successes, near successes, and concerns of teachers regarding utilization of the diagnostic/prescriptive process, we see certain needs that must be fulfilled, as well as capabilities and competencies that must be developed:

1. Teachers must understand the rationale behind the diagnostic/prescriptive process, and the four elements of the strategy.
2. Teachers must be provided sufficient support and assistance to guarantee some measure of success. This support and assistance must be supplemented by additional resources as the level of personnel sophistication and capability increases.
3. The expertise of the various specialists in the school should be readily available to and easily utilized by the regular classroom teacher. This is the concept of "teaming," which must include the goal of working together to develop personalized classrooms.
4. Teachers must be provided with a variety of materials appropriate for multi-sensory learning and they must develop skills to effectively manage and organize this influx of new materials, person-power, and teaching techniques.
5. Teachers must develop the ability to observe student behavior, particularly behavior which indicates failure, and interpret the behavior diagnostically, rather than judgmentally.
6. Teachers should work towards creating a learning environment that reaches beyond the four walls of the classroom to any resource that might benefit the child.
7. Appropriate record keeping systems must be developed.

Pupil Services

In the Oak Grove School District, the Pupil Services Department is defined as the department that includes all health services, psychological services, and special education programs. The Pupil Services Department has significant amounts of materials, monetary resources, and personpower so that if they were made available to the regular teaching program, many of the stated needs of the classroom teacher could be fulfilled. The question is how to provide for

this access without abusing the rights of the identified special education student.

To do this, the structure of special education departments should utilize an approach that will most effectively allow for redirecting special education capabilities. It will have to be one that creates new roles for special education personnel so they can fulfill the needs presented by both normal and exceptional children.

The approach which appears, at present, to be the best available alternative for freeing special education personnel for these new roles is mainstreaming. The relationship between the diagnostic/prescriptive process and mainstreaming is clear. Special resources, personpower, and materials, for individualized instruction should be available to all children as the need arises. It suggests that all children are "special," as indeed they are.

The kinds of expertise that have emerged from special programs have application in regular programs. Entry into the regular program of Pupil Services personnel as resource personnel for the entire school would offer all children the potential of a more meaningful classroom environment.

Special education personnel more than any other group of educators could develop the capability to function as change agents, and learn how to deal with the inevitable frustrations and conflicts that will arise in the wake of mainstreaming. Special education personnel must not dismiss their hard-won expertise lightly, rather they should assume leadership responsibility to demonstrate, train, explain, and further develop that expertise so that all children would benefit thereby, not just those labeled special.

Parents

The implication of diagnostic/prescriptive teaching for parents is that they must become involved in their children's education. Parents should participate in the decision-making processes that determine what and how their

children learn, though they must be willing also to recognize the school's expertise and responsibility for developing strategies to reach those goals. It is self-evident that prescriptions can be more effective if the child's formal learning environment reaches beyond the four walls of the classroom and into the home.

This is a process that emphasizes cooperative working relationships between home and school. This cooperation is particularly important in view of the relationship between learning and environment. If the home and school environments are complementary and consistent, learning will be enhanced. Teachers will find they have another valuable resource in parents, and parents will find themselves actively participating in their child's school experience, and contributing valuable input to the child's educational growth.

Conclusion

In diagnosis and prescription processes, the degree of a school's involvement in those processes is dependent on a number of variables. A school does not suddenly transform itself into a model for diagnostic/prescriptive teaching. You modify, you adapt, you project, you anticipate, you fail, you succeed; but you allow it to happen. Any measure of success we have realized at Blossom Valley has been the result of all of the above.

We did not come together for the purpose of demonstrating diagnosis and prescription, or to plot a foolproof procedure. All of us are not now at the same place in our application of diagnosis and prescription. As each of us continues to explore, we realize even more that it is a collection of strategies, and that we must develop effective channels of communication to allow for free exchange of ideas, techniques, and resources. Perhaps more than a staff structure, it is a staff attitude, a realization that we are all here to meet the individual needs of the children in our school and must work together to that end. The diagnostic/prescriptive process we have described

is a combination of what we have accomplished and what we hope to accomplish. We are moving toward more effective individualization using diagnosis and prescription.

Acknowledgments

This paper is a product of a three-year work experience at Blossom Valley. Many of the concepts discussed here are based on the efforts of the staff members. Specific credit is given to Ruthann Bronson, Speech Therapist, and Sheryl Shanley, Resource Teacher, for contributing much of the substantive information regarding the D/P process.

FOOTNOTES

1. Rathbone, Charles. Open Education: The Informal Classroom. New York: Citation Press, 1971, p. 100.

2. Oak Grove School District Educational Goals Study. Mimeo. Center for Planning and Evaluation, 1110 N. 10th St., San Jose, Calif. June 1972.

3. Ibid., Appendix D.

An open space elementary school in Federal Way, Washington, has instituted a system for individualizing programs for all its students with a differentiated staffing arrangement, and an emphasis on continuous assessment procedures to monitor students' daily performances. Five credentialed teachers provide educational planning and instruction for 300 children, with the assistance of 15 college interns, 15 instructional aides, and 40 preschool mother-helpers. Two full-time and one half-time consultants are responsible for training, supervision, and evaluation.

BRIGADOON ELEMENTARY SCHOOL:

INDIVIDUALIZED INSTRUCTION THROUGH CONTINUOUS ASSESSMENT*

When you first enter Brigadoon Elementary School in Federal Way, Washington, you are asked to answer a brief questionnaire to rate your feelings (positive to negative) about such matters as open concept schools, contingency management of behavior, and continuous assessment of children's progress. When you leave, you are asked to respond to the second part of the questionnaire to rate your impressions of whether the children seemed happy, if the noise level was distracting, if you would want to work in such an environment, etc. Like many open space schools, Brigadoon is very accessible to the observer. Unlike many open space schools, Brigadoon is operating at only half its capacity (300 students). Because of a relationship with Seattle Pacific College, Brigadoon has 15 interns to assist the four team teachers, as well as 40 volunteer mother-helpers, who function as part-time aides, while their pre-school children are cared for in a program oriented toward an expansion of learning activities for three- and four-year olds. Brigadoon's involvement in the integration of normal and handicapped children came about through a series of unplanned, but well-timed, circumstances.

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Vincent Smith, Director of Special Education for the Federal Way School District, had long held the belief that if regular classroom teachers were taught to individualize instruction--if they were given the resources and the know-how--then the mildly handicapped child could be served there, and the school wouldn't need self-contained special education classrooms, or even resource rooms.

Says Smith,

> Four years before Lilly[1] published his zero-reject model we had decided that, if we kept on taking children people couldn't get along with, it would be like the hourglass--you'd take them all from one side and put them on another side.

Five years ago, the Federal Way School District disbanded all their self-contained classrooms and moved to a Learning Center concept. They had one, then four, then ten centers among the district's 18 elementary schools.

Smith's experience with the learning centers in one of the earlier open space buildings was frustrating:

> We had many identified special education youngsters and I was trying to integrate them into the classroom at that time, but the teachers were new to the open concept school setting--and our kids were getting lost. We were able to do some nice things in the learning center; but when they went back to the open concept building, they seemed to lose what we had built up in the center. So I thought, why not make the whole building a learning center? Then, if we combined that with a differentiated staffing concept, we would have the people we needed to individualize instruction for all the children.

Smith wrote a proposal for Title III funding, "Handicapped and Normal Children Learning Together." The goal was to provide an individualized program for every elementary-aged child residing within the school attendance area, with performance levels ranging from those of the mildly handicapped to the gifted. The population to be served was 300 students, 15 percent of whom were identified as those to receive special services in other educational settings. All children were to be educated together; there would be no segregated placement for special needs.

To achieve individualization for each child, the following concepts were employed: continuous progress (pupils move through curricular programs as they met criteria levels); continuous assessment (time samples taken on academic performance to be used in making decisions on child's need for program change); contingency management (reinforcement schedules for behavioral and academic objectives); and differentiated staff (Principal-Director; two and one-half consultants, five certified teachers, 15 teacher trainees, 15 instructional aides, 40 preschool mother-helpers).

Smith's proposal was funded, but the school he chose for the project was unacceptable to the Department of Education because it did not include enough children in the lower socioeconomic range. Brigadoon had just opened and its principal, Eben Robinson, was willing to take on the whole project without advance warning.

The Brigadoon elementary school is situated in a suburban area midway between Tacoma and Seattle. It was built to serve a housing tract planned for 720 homes. When Boeing lost the TFX and the Supersonic contracts, the area suffered extensive economic damage, which is nowhere more apparent than in the Brigadoon tract where only 50 of the 720 sites have homes on them.

Brigadoon serves an area larger than the tract, however, and two years ago the school had scored lower on district-wide achievement tests than most other schools in the district. They had 42 children who would have to be served by a resource room, if not a self-contained classroom, if some alternative program was not devised. And they had Eben Robinson:

> I had a traditional attitude toward special education. At my previous school, we shipped kids out to learning centers. I was pretty comfortable with that because it got rid of a lot of problems, but not comfortable enough. Regardless of how many of these children you take away, you always have at least one who is at an extreme somewhere. And that's where you have to be accountable for what you're doing. When approached to take on this project, I was intrigued, because I knew it would give us a chance to individualize programs with a little bit of money and a little bit of expertise. Without this program, I would be in the same hassel so many principals are--trying to individualize programs with a traditional 30:1 pupil/teacher ratio and using only volunteers.

The staff was enthusiastic about taking on a differentiated staff/continuous assessment approach to individualizing instruction, although they had very little idea about what they were getting into. They knew only that they might be able to do something with handicapped children rather than to them. So the Title III program came to the Brigadoon school.

Staff Training

To enable these teachers from a rather traditional mode to function within a team structure that incorporated individualizing required a substantial retraining and inservice program. Further, when the program began, the curriculum had to be revised, so that the major emphasis was on training and curriculum revision.

Jean Smith, consultant to the project, was initially charged with providing the training situation. Teacher training consisted of a six-week program in which inventory types of diagnoses were taught. The staff worked with small groups of children and received a fairly comprehensive overview of what they would need in terms of management techniques, reporting, and evaluation.

In the fall, every child received a battery of curricular placement measures to record specific performance levels in the various skill areas (language arts, math, reading, P.E.). Skill groups were formed for small group instruction, and to facilitate monitoring. Each child received individual academic assignments on a contract form at his/her identified, independent performance level. The continuous assessment procedures involved administering criterion tests at the completion of assigned units. In addition, daily measures were taken on specific behaviors to note rates of progress. This information was used in ongoing programming to ensure continuous progress for each child.

To perform these tasks the teachers needed a variety of skills. Individual student assessment and assignment to an academic program required the teachers to become competent in diagnosis (selecting a test instrument, testing, and

analysis); prescription (setting objectives, scheduling, selection of materials, and evaluation procedures); instruction (small- and large-group presentations, individual interactions, and continuous assessment); and contingency management procedures. Additionally, the teachers were expected to assume responsibility for the teacher trainees, the aides, and the preschool mother-helpers.

The trainee program is a cooperative venture with Seattle Pacific College; the students' tuitions are paid for by Brigadoon, and they spend most of every day in the Brigadoon classrooms receiving on-the-job training.

Setting up a good field experience for the 15 teacher trainees from Seattle Pacific College has been a lot of work. It's not surprising that Brigadoon's teaching staff is tired. But they rally quickly - they have to. Each year a new batch of interns arrive and the process begins again. The trainees appear to benefit tremendously from the experience of working in a fishbowl, with visitors passing through all the time, and mothers sitting in the classrooms every day.

The trainee is expected to assume a number of responsibilities, with the staff teacher, for planning lessons, monitoring the students' completion or correction of contractual assignments, administering and compiling diagnostic evaluations, and monitoring student continuous assessment procedures. With this kind of specific and intensive training, most staff feel that, by spring, the interns are sufficiently competent to handle the students without supervision.

The instructional aids and preschool mother-helpers also have specific functions within the program. They listen to children read; dictate spelling words; correct math, spelling, and reading workbooks with students, thus providing immediate feedback; and monitor contract assignments and individual lessons. They also participate in management procedures which are consistent with the child's program objectives, and they chart student progress, as well as duplicate materials and file papers, when necessary. Several of the aids have

gone through a teacher aide course at a local community college, but most of them were selected by the staff teachers on the basis of their interest in children and desire to work in the program.

The preschool mother-helpers constitute Brigadoon's best public relations medium. The preschool center is their payoff, and Brigadoon can rely on the mothers coming to work in the classrooms when they say they will. There is one teacher and one aide in the preschool area, and about 40 children are accommodated during the week on a staggered schedule. Because the mothers are directly involved in the elementary classroom work, they have a precise knowledge of the kind of program Brigadoon is running. They spread the word and generate tremendous community support for the program.

Program Management

Individual academic assessment begins with the initial diagnosis and is continuous from that point. Criterion measures are taken as the pupil progresses through curriculum materials that are divided into small units to facilitate the process.

The primary vehicle for individualized instruction is the contract. At the primary level (K-3), assignments are made on a daily basis with the child given a number of tasks to be completed. At the intermediate level (4-6), the contracts are by subject area and may extend beyond one class period.

All pupils assume some level of responsibility for the management of the contractual process, including posting of criterion measures of reference, which is one aspect of continuous assessment.[2] Students participate in the system at various levels of complexity, depending on their age, e.g., they unofficially time each other and do charting. Communicating with parents was done on a weekly basis last year in the intermediate grades. This year the parents can have a weekly report if they request it, but none have done so. The data collected in classrooms are used to support what the teachers and

parents discuss in their conferences. The data provide a clear picture of how far a child has progressed in a specific skill area, and this evidence is used as a basis for determining future progress.

The Problems

In the view of the Assistant to the Director of Special Education and on-site evaluator to the project, Chuck Zimmerman, the project is not by any means complete:

> We've individualized pretty well in basic skills, but not so well in social studies and sciences. When the kids are in larger groups in the afternoon, individual differences begin to surface and we need to handle these better. They still identify individual differences, and I think that's something we have to attend to. We have to determine some way to structure equality of feelings or tolerance of individual differences. The differences will still surface--not to the extent they would if the children were labeled--but I think we have to deal with this in some way. Just because we put children with a wide range of differences together, they won't necessarily be tolerant of each other.

Darwin Bevens, another curriculum consultant, talks about the deficiencies in their precision teaching methods:

> Most of the pinpointed behaviors we're counting now are rather simplistic. But we are developing more complex kinds of pinpoints--we're moving into the affective domain more. As we've taught our children to count and chart their behavior, we're teaching them to self-count such things as how many times a day they feel badly towards a teacher or another child. They keep a daily chart of this, then we'll put in some sort of program change to change how they feel. We're just beginning this self-counting. Precision teachers have been doing self-counting for a long time, but it hasn't been used in the classroom that much. It's useful data and more precise than we've gotten from counseling sessions with children. I think the way to get to the affective areas is through evaluation and continuous assessment, and by building success levels and having a success-oriented program. That's the way to get the climate in the classrooms that we want, and to keep track of all the things that build that climate, we have to have evaluation.

The program experienced the initial negativity from the community that often greets programs such as these. There were the usual number of people within the district who thought handicapped children were going to be bussed into the community. They were shown that these were children in their own attendance areas. It was explained that the program proposed to serve every

child who was already in the attendance area. For the most part, the explanation was accepted. Early in the program there was a small group of parents who were supportive, and there was never any vehement opposition.

Robinson feels that the resistance of parents and school board members is due to their nervousness about having handicapped (either mentally of emotionally) children interact with normal children, because they don't know anything about the program. He tries to keep people informed through a weekly newspaper, but feels that the only way the program can really be understood is to invite opponents to visit the school. Slide-tape presentations were shown to all board members and at parent meetings, but the people who were most opposed to the program were persuaded to visit the school, and they have gone away with very positive feelings.

There is still the problem of overloading staff teachers with training responsibilities for the new batch of interns every year. Some of the teachers wonder if it's worth it, and some comment on the fact that, while the staff is differentiated, the salaries are not. At present, the staff is working with representatives from Seattle Pacific College and the district to develop a program of certification for the teacher interns that reflects new (1971) state guidelines. The arrangements that are finally agreed upon will significantly affect Brigadoon's program--perhaps the interns will come for a shorter period and cost the program less, or even no, money. This will relieve the teaching staff of some of its training responsibilities, but they may find it even more difficult to work without these interns.

The Successes

The 1200-1400 visitors who have observed the Brigadoon program in the last three years have seen, perhaps for the first time, new procedures and materials used with children. People's attitudes, as well as their teaching methods, have been influenced by what they've seen. One of the strengths of

the program is that the Assistant to the Director of Special Education, Chuck Zimmerman, is a half-time member of the Brigadoon program. He has built-in the evaluation component for the program and also acts as a consultant to the staff in the daily routines. Thus, there is no sense of a central administration handing down orders that the staff is not equipped to carry out. Additionally, the principal is the director of the program, and this provides the ongoing guidance necessary for success. Robinson comments upon his leadership role:

> If I didn't have some good people aboard, I never could have done it. All of the people on the consultant level here at the school are trained in special education. With that kind of expertise around, I don't get too uncomfortable--they know how to handle certain aspects of the program that I have not had experience with.

Vince Smith has been Director of Special Education for eight years. Before that there was no special education in the district. He started with the self-contained classroom, the second year he began integrating the children by establishing a resource room where the home base was the regular classroom. Handicapped children belonged in the regular classroom, but the resource teacher would take them for an hour or two a day. What began to happen was that the teachers found they had other children who needed the resource room as much as the ones who were identified. Smith says,

> We had a number of principals who were very sympathetic and thought that it was their responsibility to serve their kids at home. They told their staffs that these children were their responsibility and the resource room was there to help them out. With that kind of support, we couldn't lose. In those days we only had two buildings working this way with handicapped children, and I still had self-contained classrooms. But those two buildings were so successful, (we were able to serve so many more children and still provide other services to the building), that pretty soon the principals of the other buildings said they would like to get in on it too. So we started to expand.
>
> In this state we're struggling through to a functional definition and identification of handicapped youngsters. We realize that IQ tests aren't all that functional. They may even discourage the teacher from teaching a particular child. We're attempting to identify children on this functional basis ("the child is at this proficiency level and we

want to move him to that level") using SST probes* plus teacher-made tests, and teacher's opinions as to how the child is functioning. All these things will be utilized to place the youngster.

Evaluation

A large amount of data on students have been collected and reported in mimeographed form, summarizing the second year evaluation effort

Objectives[3] for serving the handicapped population include:

1. Maintaining academic acquisition rate in equal proportion to peers.

   This relates to the ratio of amount of change that would take place over a period of time. The performance measured was the decoding task of reading words orally. A frequency count of "words said per minute" was employed to determine proficiency as well as accuracy. If a child increased his reading rate from 25 words per minute to 50 words per minute, he would double his rate or have a X 2.0 increase. The charting procedures employed in this project allowed a continuous assessment of this "rate of change" for each pupil. These data were summarized at intervals during the 1971-72 school year. In 20 of the 25 grade level reporting periods, the rate of change for the identified handicapped was equal to or exceeded the rate of change for their peers.

2. Lower 10 percent of each grade level maintaining proportionate distance from group grade level.

   This is an attempt to move away from the use of the categories generally assigned to children identified as handicapped. However, this objective has been discarded since it has proved to be confusing and is essentially covered by the first objective.

3. Children identified as emotionally disturbed (ED) will be maintained socially in the project.

   Generally, by definition, an ED child is unable to be maintained in a regular classroom without additional assistance (psychological counseling, resource room involvement, etc.). The identified ED children in this project were maintained in the classroom without extra resources and progressed academically in reading decoding at a rate slightly exceeding their peers for the first half of the school year.

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*A procedure that screens children for special education. Funded partially by Title VI, Part G, there are three Washington cities (Seattle, Spokane, and Tacoma) in which the project staff is operating. In addition to identifying students below peer level performance, the SST procedure leads directly into remediating instructional strategies. The technique permits the specialist to write educational prescriptions and establish long- and short-term objectives. Thus, it has the advantage of permitting both initial screening and prescription in a single operation.

4. Grade level equivalent of handicapped children will equal or exceed control group.

The reading subtest of the Jastak Wide Range Achievement Test was used. A control group of students from ten elementary schools in the district were selected on the basis of matchings on size of school, open concept school setting, number of identified handicapped students in the building, and previous test scores. On the Jastak Wide Range Achievement Test for the experimental and control groups, the evaluation included the following table:

Median Grade Level Gain for Identified Handicapped and Control by Grade Levels[4]

Grade	Brigadoon	Control
1	(N=7)	(N=4)
2	+ .8 (N=11)	+ .3 (N=11)
3	+ .3 (N=13)	+ .3 (N=6)
4	+ .6 (N=8)	+ .7 (N=9)
5	+ .6 (N=9)	+ .8 (N=11)
6	+1.4 (N=4)	- .25 (N=7)

On the basis of the above data, it was concluded that, "Each school had greater measured median grade equivalent gains at two grade levels with one grade level equal. Looking at the magnitude of the difference, Brigadoon's grade equivalent gains were greater." No mention was made regarding reading achievement of the handicapped; data on the entire school population are reported.

5. The mildly handicapped will maintain social contact with normal peers at a rate at least equal to that with other handicapped children.

The staff made observations and recorded the "number of associations" each handicapped child made with his handicapped and nonhandicapped peers. Over a period of a year, the staff identified a total of 172 associations the handicapped children as a group made with their peers; 26 percent were with nonhandicapped children. These results led the staff to conclude that at Brigadoon those identified as mildly retarded are not, as a group, isolated in their peer associations.

The conclusions drawn by the program staff were:

Each child in the school does in fact have an individual program.

Handicapped children are progressing at a rate proportionate to their normal peers, as measured with specific behavioral assessment of a basic decoding skill.

A standardized assessment yielding grade level equivalent growth shows the Brigadoon handicapped children achieving at least as well as the control group of handicapped children.

The Future

This is Brigadoon's last year of Title III funding, but there is a possible dissemination or diffusion grant from Title III, if there are enough people interested in moving components of this project to other schools in the district or state. If the number of visitors to Brigadoon is any indication of that interest, the diffusion grant will probably be funded.

The advantages of monitoring students' daily improvement through a continuous assessment procedure are obvious when there are sufficient numbers of adults to interact with the students. The students show demonstrable improvement in basic skill areas and the individualized approach allows them to work at varying levels without the stigma of grouping them according to ability.

Voluminous data can be generated by this method of instruction, and these data will be useful only to the extent that they can be easily processed and translated to the staff and students.

For many teachers, precision teaching techniques will be very valuable. It can enable them to determine what affect their teaching is having on students, and it can give them new skills that enable them to facilitate learning, perhaps for the first time, in all their students.

Ogden Lindsey summarizes his view of precision teaching:

> Any teacher who is now comfortable with her style of teaching, her hard learned way of communicating with her students, and the unique way she expresses her love for her students would not substitute precision teaching for what she is doing. She simply adds precision teaching techniques to her current style in order to become even more efficient. Precision teaching tools are designed to improve and refine current teaching methods and materials. That's a confusion I find in a lot of teachers. They fear that if they try this new thing they will have to temporarily put aside or abandon their trusted teaching skills. Precision teaching simply adds a more precise measurement instrument to present teaching, making teaching more economical, more effective, more enjoyable, and more loving.5

FOOTNOTES

1. Lilly, M. S. "Special Education: A Teapot in a Tempest," Exceptional Children, Vol. 37 (No. 1), (Sept. 1970), pp. 43-49.

2. "Handicapped and Normal Children Learning Together," 1971-72. Project Report, Mimeo, pp. 3, 29.

3. Objectives paraphrased from second-year evaluation report, 1971-72.

4. Ibid., p. 16.

5. Lindsley, O. "Precision Teaching in Perspective," Teaching Exceptional Children (Spring 1971), p. 119.

*The Madison school plan is a model for gradual reintegration of exceptional children into regular classes. Children are initially grouped according to their readiness to meet regular class demands. These are specified in terms of preacademic skills and behaviors such as the ability to follow directions; academic skills such as reading; behavior in instructional setting such as large-group interaction; and response to reinforcers such as social praise. As children become proficient in these areas, they are advanced to more regular classroom-like settings and are given greater opportunities to attend regular classes during the school day.**

THE MADISON SCHOOL PLAN: ENGINEERING FOR MAINSTREAMING*

The Madison school plan is the brainchild of Dr. Frank Hewett, Professor of Education and Psychiatry, and Chairman of the Department of Special Education at the University of California, Los Angeles, and Dr. Frank Taylor, Assistant Superintendent, Department of Special Services, Santa Monica Unified School District, Santa Monica. The program came about as a result of Drs. Hewett's and Taylor's analysis of the dilemma of regular versus special class placement for educable mentally retarded (EMR) and educationally handicapped (EH) children. Labeling children as retarded or disturbed and placing them into segregated, self-contained special classrooms have detrimental effects on their academic and social growth, proponents of mainstreaming maintain. Furthermore, they maintain that efficacy studies have not demonstrated a significant difference in academic and social growth between EMR and EH children in self-contained classes and those in regular classes. Others, however, conclude that data from efficacy studies are, for the most part, invalid since these studies have been poorly designed and executed. They also point out that physical integration of EMR children with regular children does not necessarily mean psychological and social integration. What is there to prevent the special child from becoming

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"the dummy" in the regular class again--the very reason why he/she was taken out of the regular class situation in the first place.

The Madison school plan is an attempt to resolve some of these issues. The basic assumptions are:

1. EMR and EH children are, first and foremost, learners. Regardless of their problems, they are at all times ready and able to learn.
2. Regular class placement can be beneficial to a large number of special children, provided there are quality support services available to them.
3. Teachers should be concerned only with what they know best, namely, the mastery of skills and the behavior related to that.
4. The best way to prepare children for regular classes is through the process of gradual approximation of the regular class environment, using behavioral contingency techniques.

The present Madison school plan had its beginning in 1966. At that time, the special education staff in the Santa Monica district was concerned about the increasing number of children of average intelligence in the district who were inattentive, hyperactive, and failing in regular classes. The staff realized that these children had the potential to achieve in school, if some appropriate program could be developed for them.

Dr. Alfred Artuso, the district superintendent at Santa Monica, and Dr. Taylor learned about the "engineered classroom" approach developed by Dr. Hewett at UCLA, and they recognized its potential for meeting the needs of these children. During the late 1966-67 school year the engineered classroom approach was implemented at Santa Monica with the assistance of a Title III grant from the Bureau of Education for the Handicapped, USOE. The Title III project ran for three years and, at the end of that period, engineered classrooms had been established in several schools in Santa Monica.

The engineered classroom served as the forerunner of the expanded Madison school plan. The expansion of services came about because the engineered classroom

had a basic limitation: it was largely a self-contained classroom--there was no freedom within the structure to move children from the special class to the engineered class, and from the engineered class to regular classes. The Madison school plan, first implemented in the Madison Elementary School in 1969, is an attempt to allow for this flexibility of movement. The Madison plan, supported from 1968 to 1970, by the California State Department of Education (Title VI B) eliminates traditional disability groupings and provides an educational context in which children are assessed and promoted on the basis of their readiness for regular classroom functioning. Since 1970, the Madison school plan has been operating on existing special education funds.

The cost to operate four engineered classes and six learning centers for the school year 1970-71 was estimated at approximately $250,000. The four classes and six centers provided service to more than 250 children. Therefore, less than $1,000 per child was spent.

Program Description

The Madison school plan is a competency-based program designed to teach children all necessary skills and behavior required for success in regular classes. The objective of the program is to ready children for regular class placement, and to maintain them in regular classes once they are placed.

Readiness for regular class functioning is defined in terms of the demands of the regular class. Basically, these demands fit into four major categories: preacademic skills, academic skills, instructional setting, and the use of reinforcers.

Preacademic skills: behaviors such as starting work, following directions, paying attention, and observing classroom skills are considered prerequisites to success in regular class. Academic skills: include the mastery of basic skills in reading and arithmetic. Instructional setting: prepares students to function in the regular classroom environment by learning to work independently. Reinforcers: verbal praise, recognition, and grades are the most often used reinforcers in the regular classroom and children are gradually introduced to this reward system.

Children are placed in the Madison plan according to their readiness for regular class functioning based on these dimensions. At the beginning of the school year, as many of the identified handicapped children as possible are placed in regular classrooms for a period of one or two weeks. This is done to establish a regular class home base for each exceptional child, to acquaint him/her with peers and teacher, and to establish from the onset the regular classroom teacher's responsibility to the child's educational program. Following that initial period, each child is placed in the Madison plan and returned to regular classes for selected activities and lessons whenever possible.

The layout of the Madison plan, sometimes referred to as the learning center, consists of two classrooms with an adjoining door. The first classroom is designated Preacademic I, and the second classroom is divided into two areas: Preacademic II and Academic I. Labels such as EMR, EH, or special class are not used. Two certified special education teachers (one EMR and one EH or two EMR and one EH teacher) and two aides for 24 to 45 children staff the classrooms. The EH teacher and aide are given full responsibility for children assigned to the Preacademic II and Academic I setting. Normally there are from 30 to 36 children enrolled in the plan. No special physical facilities or equipment are needed to operate the program, except for an adjoining doorway between two classrooms. Standard school supplies and equipment are used. Descriptions of the specific areas follow.

Preacademic I: This classroom is a highly structured, self-contained class. The major focus is to teach appropriate classroom behavior, such as sitting at the desk, paying attention, following directions, starting and finishing work, and getting along with others. A major challenge is to create a predictable environment so that the child does not experience ambiguous expectations and is rewarded for his accomplishment of specified tasks and not rewarded if he fails

to meet reasonable expectations of behavior. The class operates under a token economy system. A system of check marks is used to reinforce appropriate behavior which can be later traded for free time, candy, or food. The students are seen as workers and the check marks as their earnings for tasks accomplished. It is felt that this reward system operates to motivate performance and increase self-concept through successful, positive experiences in the classroom.

Most of the instruction is done on one-to-one basis, or in limited group activities. One teacher and one aide constantly circulate among 6-12 children to help them with their tasks and dispense check marks. A number of learning centers are set up where individual children can go for exploratory, ordering, and mastery skills. These centers are stocked with materials and children work independently. This particular instructional setting has been referred to as the "engineered classroom."[1]

Preacademic II: When a child has demonstrated satisfactory behavior at the Preacademic I setting, he/she is moved to the Preacademic II setting. Here the focus is on remediation of academic skills, particularly in reading and arithmetic. The check mark system is maintained; however, the practice of dispensing candy or food is discontinued. Accumulated check marks can be traded for 15 or 20 minutes of free time. The instructional grouping changes as well. In the Preacademic II setting, six to eight children sit at a cluster of tables, receiving all their instruction as a group. The setting is designed to encourage social interaction and verbal participation in group lessons. Beginning with Preacademic II, each child may be integrated into a regular class, such as music or art, for some period of the day. The staff for Preacademic II can be either a teacher or an aide.

Academic I: This section of the classroom is a simulated regular classroom setting for 12 to 25 children with academic problems that can be dealt with in

a large-group setting. The arrangement of desks is that of a regular class. The teacher presents lessons in reading, arithmetic, spelling, social studies, and English. Students are expected to work independently and participate in large-group discussions. The check mark system of reinforcement is discontinued and replaced by the traditional grading system and verbal reinforcement based on effort, quality of work, and deportment. Major emphases are on remedial and grade level work. Students in the Academic I setting spend increasingly more time in regular classes. Again, the staff can be either a teacher or an aide.

Academic II: This is the regular class where 28 to 35 children receive the general education program. Major emphasis is on attainment of standard grade level achievement for exceptional children. This class is always taught by a teacher.

Diagnosis and Placement

Children who seem unable to benefit from regular class instruction, due to behavioral or academic difficulties, are referred by the regular classroom teacher for a battery of diagnostic tests administered by the school psychologists and usually including the standard achievement and intelligence tests. His/her findings are reported to a placement committee consisting of the special education teacher, the regular classroom teacher, the school psychologist, the building principal, the district supervisor in special education, and other school personnel. The committee then recommends placement in a special class. At this level, the diagnosis and placement practice is similar to that used by most school districts. Before a child is actually placed in the Madison plan, however, the project staff administers a special placement inventory to determine whether the child should be placed in the Preacademic I, II, or Academic I setting. The Madison plan Placement Inventory is given to the regular classroom teacher to rate the child's level of readiness for reintegration into regular class. The inventory questions are reproduced

below. The teacher has the choice of answering "yes," "no," or "maybe."

Can child spend time in a regular classroom during nonacademic activity periods (e.g., music and art)?

Can child spend time in a regular classroom during academic work periods (e.g., reading, arithmetic, social studies)?

Do child's problems in paying attention, starting work, doing what he is told, and getting along with others overshadow his problems in reading and arithmetic?

Can child pay attention, start work, and do what he is told in a group of 8 to 10 children?

Can child work independently for 20-minute periods?

Can child take part orally in a discussion with 8 to 10 children?

Can child use and understand language correctly?

Can child get along with other children in a group of 8 to 10?

Can child share desk and storage space with another child sitting close by?

Can child function well behaviorally and work on assignments without immediate and frequent consequences in form of check marks and tangible rewards?

Does child work for letter grades and are they meaningful to him?

Does the child work for social approval from the teacher?

Does the child work for social approval from his classmates?

Can child pay attention and listen in a group of 11 to 18 children?

Can child start and work in a group of 11 to 18 children?

Can child understand and follow directions given by a teacher to a group of 11 to 18 children?

Can child pay attention and listen in a regular classroom group of 30 children?

Can child start and work independently in regular classroom group of 30 children?

Can child profit from instruction given to an entire regular classroom group of 30 children by the teacher in front of the room?

Is it likely that child will take part orally in a discussion held in a regular classroom group of 30 children?

Can child follow classroom rules with respect to being out of seat, talking out, raising hand, etc., in a regular classroom group of 30 children?

Can child get along with others in a regular classroom group of 30 children?

Is the child functioning within two years of grade level in reading?

Is the child functioning within two years of grade level in arithmetic?

A simple coding sheet is provided to tally responses and, on the basis of rating clusters, the child is placed in the appropriate instructional setting. The program staff have expressed confidence in the validity of the inventory and have continued to use it for placement purposes.

Progress Assessment

Continuous evaluation of student progress is done through the use of the check mark system and a system of task and setting behavior ratings. The check mark system is used in Preacademic I and II settings. Every 20 minutes teachers record a possible ten check marks on each child's Work Record Card. These check marks, in this case alphabet symbols, are given for the following behavior:

Attention = (A) Child's eyes are on teacher or task as expected, or there is evidence that he has listened attentively.

Starting = (S) Child has undertaken task immediately upon presentation with no dawdling beforehand.

Working = (W) Child has maintained working with no interruptions.

Taking part = (T) Child has been a willing participant in discussion or activity. Oral expression is particularly important for many children.

Following directions = (F) Child has followed directions in relation to task (e.g., name, date on paper, specific procedure of task).

Doing what you're told = (D) Child has maintained appropriate behavior according to classroom standards.

Getting along = (G) Child has cooperated with another child or refrained from disrupting class or bothering peers.

Being right = (R) Child has done work correctly with few, if any, errors.

Being neat = (N) Child has made effort to approach work in controlled manner, presenting it attractively, easy to read, within margins or lines, etc.

In Preacademic I, when a child has earned 180 check marks, which fill the card (usually within two days), he/she is entitled to trade it for candy, cookies, or some free time (20 minutes). In Preacademic II, children exchange their check marks for free time only, and no check marks are used in the Academic I setting. Once a program has been established for a child, the expectations are increased and geared to a pace that the child can tolerate and still experience success. The teacher thus "engineers" a program of remediation in which the classroom environment is manipulated to produce efficient learning and continual success for each child.

Teachers also rate individual students on their readiness to begin regular class functioning in terms of the task assigned and the setting in which he/she is working. Two separate ratings--the task behavioral rating and the setting behavioral rating--are given to students in all educational settings. They serve to assess student readiness for reassignment to the next instructional setting. In the Preacademic I and II settings, these ratings are recorded on the Work Record Chart every 20 minutes by the teacher, after check marks are dispensed. In Academic I, they are recorded on a rating sheet once every hour.

The task behavioral rating consists of a scale from 1 to 5:

Rating of 1 = The child's response was inappropriate and inefficient in response to the task.

Rating of 2 = The child's behavior was generally appropriate in that he/she paid attention, started and worked independently, but was generally inefficient in following task directions, completing the assignment and being correct.

Rating of 3 = The child fulfilled the expectations of (2) and, in addition, was generally efficient in accomplishing the requirements of the task.

Rating of 4 = The child fulfilled the expectations of (2) and (3) and all task requirements.

Rating of 5 = The child fulfilled the expectations of (2), (3), and (4), completed the assignment, and was neat, well-organized, and very efficient with his time.

The setting behavioral rating also consists of a scale from 1 to 5. These ratings reflect the acceptability of the child's behavior in the setting in which the task was presented.

Rating of 1 = The child's behavior was unacceptable in the assigned setting.

Rating of 2 = The child's behavior was acceptable in the Preacademic I setting.

Rating of 3 = The child's behavior was acceptable in the Preacademic II setting.

Rating of 4 = The child's behavior was acceptable in the Academic I setting.

Rating of 5 = The child, working in the Academic I setting, functioned so well that he/she could have been clearly acceptable in the regular class.

Children who are assigned to multiple settings are rated according to their acceptability in these settings. For example, a Preacademic I child will get ratings of 1 or 2 when he/she is in the Preacademic I setting, however, for the period(s) he/she is assigned to either of the other two settings, he/she becomes a candidate for a "3" in Preacademic II or a "4" or "5" rating in Academic I.

Average weekly task behavioral and setting behavioral ratings are computed and plotted on graphs. It enables a quick review of individual progress on a weekly basis, as well as serving to determine if the child is ready for placement in the next instructional setting.

Training

In 1973, personnel training was carried out through support from the California State Department of Education (Title VI-B). Called Train and Trade, the training program was designed to provide regular classroom teachers with the knowledge and

skills to work with exceptional children in the regular classroom. The Train and Trade program consists of 12 hours of training spread over six weeks. The trainees meet for an hour a week after school; during this time successful teaching techniques for exceptional children are presented and discussed. The remaining six hours of the training session are spent in the learning center during regular school hours. Trainees are given practicum experience in the areas of classroom management and intervention techniques, such as behavior modification and individualizing instruction. While regular classroom teachers are being trained in the learning center, substitute teachers are hired out of the Train and Trade budget to take over their classes. For participation in this six-week session, all trainees receive two and two-third credits from the University of California in Los Angeles. All related fees and tutors are paid from the Train and Trade budget. During the first year of operation (1972-1973), all certified personnel from Madison School have been trained.

The first year Train and Trade sessions were conducted by the special education staff of the Santa Monica district. Future plans include training building principals to conduct training sessions for their own staffs and to hold training sessions for personnel outside of the Santa Monica district. A field test aimed at assessing the efficacy of the Train and Trade Program is currently planned.

Frank Hewett feels that the best teachers are those who are objective and energetic and have a lot of satisfaction in their lives outside the classroom.

> I don't think that the special education teacher, whose life is largely centered around her children or whose self-esteem hinges on her success with these children is the teacher who's going to do the best job; objectivity is extremely important.

Frank Taylor agrees with this point of view and warns against what he calls a "rescue fantasy" on the part of teachers. The teacher's role is to train children to be students and learners, and not to become totally dependent on individual teachers.

Evaluation

Most of the available program development data are from earlier studies with the engineered classroom. Results are available in a 1969 final report submitted to the U.S. Office of Education.[2] No reports of data from the Madison Plan were available at this writing. From the total population of students in nine engineered classrooms during 1968-1969, the developers selected 30 experimental subjects to conduct an evaluation study. These students were matched by IQ (range on WISC, 85-120), age (7-12), grade (2-6) and sex (69 male, 31 female) with two control groups. Control group I consisted of 30 EH children in regular classes, control group II of 30 regular classroom children. All 90 subjects were given the California Achievement Test, Reading Vocabulary, Reading Comprehension, and Arithmetic Fundamentals Section in October 1968 and again (with alternate forms) in May 1969. For 32 weeks during the school year, behavior data were gathered for all students. These data included task attention and classroom deviant behavior. Task attention is measured by observers operating stop watches during five-minute observation samples, and recording the number of seconds the student's eyes, head, or body were appropriately oriented towards the assigned task. Data on deviant classroom behavior were obtained through a teacher rating scale developed by Herbert Quay and Donald Peterson at the University of Illinois and through an observation checklist, that included items such as disruptive behavior, out-of-seat behavior, making noises, etc.

Using analysis of covariance, the results of the 1968-1969 study may be summarized as follows:

1. The experimental group of EH children showed significantly more gains in vocabulary than the control group of EH children in regular classes.

2. There is no statistical significance on reading comprehension across the experimental and the two control groups.

3. The experimental group showed more significant gains in arithmetic than both control groups.

4. On the task attention, the experimental group was superior to EH controls in regular classes but not significantly different from students in regular classes.

5. The experimental group showed more deviant behavior in general, except for "out-of-seat" behavior, than their EH counterpart in regular classes.

Future Growth

The staff at Santa Monica are available to serve as consultants to assist schools wishing to set up a Madison plan. A number of school districts have, in the past, replicated the plan with the help of program staff. Guided tours are also available at the Santa Monica Unified School District.

Adapting this plan to the needs of students in other schools may require operating more or less Preacademic I, Preacademic II, or Academic I centers, depending upon the entry level of the student population. However, the flow of students will remain unchanged: from Preacademic I, to Preacademic II, to Academic I, and Academic II.

The program staff state that, in order to make the program a success, coordination among school staff, especially the special education teacher, regular classroom teachers, and building principals is essential. Certain suggestions about duties of various staff members are set forth in the Santa Monica School Plan Operational Manual[3] and an "open and cooperative relationship" among program staff is stressed.

FOOTNOTES

1. Hewett, F.M. et al. The Santa Monica Project: Demonstration and Evaluation of An Engineered Classroom Design for Emotionally Disturbed Children in the Public Schools. Mimeo, 1969.
2. Ibid.
3. Santa Monica School Plan Operational Manual. Mimeo. 1970.

THE CONCEPT AND SYSTEM OF ACCOUNTABILITY

The mandate for "accountability" in education and the concomitant rise in managerial techniques borrowed from business and industry and applied to school systems have engaged school personnel in serious conflict over the definitions of "goals" and "objectives," and their use and misuse.

The importance of data as feedback upon which to base future program decisions is unarguable, but what kinds of data will be gathered? How will they be collected? Which student skills will be assessed? What teacher competencies are to be measured? These questions directly affect the daily life of teachers and students. Where these decisions are made in unison - where they actually reflect the personal and professional goals of the teachers, and the specific and salient needs of the students; where the community-at-large has debated and decided to articulate their priorities; where the principal and the district personnel have reached an agreement that respects both the state requirements and the local school's individuality; - there the accountability system will mirror the true goals of the educational community. To the degree that the needs of any one element - students, teachers, administrators, or parents - are in conflict with the needs of another, the accountability system will restrict the potential for growth and renewal in the school. Those groups with the most power, be they administrators or parents, will exert pressure on the other groups to conform to their goals.

> ...we must create school environments which facilitate growth and support for educators. We must. . . do this because children will not be taught as people - as unique, valuable individuals - if their teachers are not treated that way. *

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* Beery, K. Teaching Triads. San Rafael, California: Dimensions Publishing Co., 1972, p. 5.

When the mystique of accountability is removed, and it is examined for what it is - merely a method of setting goals, and planning and implementing objectives, which in turn generate data used for further refinement and/or change in program strategy, the system of accountability is a natural effect of program planning. No one component is separable from another. Data collection is determined by goals that are set with teaching strategies clearly in mind. Decisions and evaluations of success and failure grow out of an analysis of the data. Why then, has the era of accountability brought with it such distrust and confusion? Perhaps because it has been used as a weapon rather than an organic part of program planning. In recent years the educational system has become a target for public anger, and accountability has been used as a threat of retaliation for a job badly done. Principals are expected to maintain a level of academic performance in their buildings that compares favorably to the national norm; district superintendents are answerable for all decisions regarding program expenditure and curriculum, as well as being under fire for not obtaining supplementary federal, state, or local monies to enhance the school system.

The people who believe that learning and knowledge are forms of continual process, and not static products that can be transferred from one person to another feel that the danger in complying with mandates for accountability may lie in the subversion of the goals of process. They fear that curiosity and discovery and exploration may suffer, if academic performances are continually measured and assessed as "products."

School people concerned with mainstreaming and the individualization of instruction seek to set up conditions so that the maximum amount of learning-as-process occurs. If those people who set the conditions (the classroom, the

curriculum, the schedule or nonschedule, the reporting and evaluation system) also set the goals and objectives for which they agree to be accountable, then less distrust and confusion may ensue. External judgments of behavior and performance are contrary to the methods and goals of self-direction and self-evaluation that child-centered philosophies pursue. Difficult as it may be to objectively measure the growth in self-confidence of one child, if this goal is important to the teacher, he/she will find the language and procedure to demonstrate that it has been achieved.

Teachers who see themselves as continual learners - people in process - tend to be able to most successfully personalize their classrooms. How are their competencies to be evaluated? If they have a part in setting criteria for the evaluation measures, then they will be certain to structure the assessment so that their own growth will be a top priority.

> Self-directing people have learned to critically and accurately evaluate themselves as a base for further growth and production. Self-evaluation is essential to self-esteem and motivation.*

The following three papers deal with the concept and system of accountability; the first is an introduction that addresses broad issues and warns against common dangers; the second, a description of one kind of accountability system predicated on systems analyses and designs; the third, a call for a system of humanistic accountability which includes more subjective, though less quantifiable, data, and the necessity for self-determination by those who teach and those who are taught.

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*Beery, Keith, personal communication.

ACCOUNTABILITY AND SPECIAL EDUCATION

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Accountability is a concept that almost everyone supports in general, but one that creates division and controversy when particular means for obtaining it are proposed. Probably the least controversial form of accountability is the financial audit. Everyone recognizes that funds must be accounted for, and the methods for doing so are well established and used in practically every area of public and private enterprise, not just in education. Even this "noncontroversial" form of accountability, however, has its dissenters. One objection to traditional financial accounting is that it obscures how much of the money in various broad budget categories (such categories as supplies, salaries, rentals, utilities) goes to particular programs the organization is trying to implement. Critics of traditional accounting argue that budget categories should reflect the allocations made to support the several programs planned by the organization: Hence their proposed alternative to conventional financial accounting is sometimes called the Program-Planning-Budgeting (PPB) approach.

If the financial audit is the least controversial version of accountability, the educational audit is the most. There is no single definition or example of what an educational audit should be, but its connotations of holding administrators and teachers liable for educational deficiencies, just as a bank teller is liable for shortages in his cash drawer, cause a good deal of justifiable alarm among educators. The concerns of educators over the misapplication of accountability concepts have been detailed in numerous publications

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on this subject: there is concern that only the more easily quantifiable goals of education will receive attention, and that the vaguer, more humane processes and aims will be ignored; there is concern that slowly accumulating gains or the delayed impact dynamics of some educational processes will be forgotten, while the often marginal effects of short-term programs will be highlighted; that the complex cause and effect interrelationships in education, and between society, the home, and the school, are not well-enough understood to hold teachers or administrators accountable for this or that effect; that accountability systems may be a step down the road to centralized control of education.

Despite the concern voiced by some educators, a concern which some noneducators see as defensive behavior by an insecure profession, educational accountability systems are under consideration in at least 25 states. Seven states have moved beyond initial stages of implementation: Colorado, Florida, Maryland, Michigan, Minnesota, Oregon, and Wisconsin. Each of these states has developed a conceptual model of an accountability system. The models differ from state to state, but seem nevertheless to have at least four elements in common: 1) Identification of educational goals; 2) Development of performance objectives; 3) Development of data gathering procedures; 4) Assessment of student skills.

It is likely that these four elements, at least, also will be found in accountability systems applied to special education. In the remainder of this essay, I will discuss several implications that accountability holds for special education. My argument is that, in general, the requirements for accountability are consistent with the proper aims of special education professionals, but that there are certain pitfalls to be guarded against.

In a field as broad and, to be candid, as ill-defined as special education, it will not be possible to discuss every content and functional area in this essay. The examples given here, however, illustrate problems common to several of the special education areas. I will focus on three related issues: 1) the statement of desired outcomes in behavioral terms, 2) the assignment of students to special education categories, and 3) certain data gathering requirements.

Behavioral Definitions

One element of almost every accountability system is an emphasis on the statement of goals in behavioral or operational terms. The use of behavioral objectives is part of a larger movement to place educational practice on a more scientific and systematic foundation, but it happens to coincide with the need, in accountability procedures, for objective measures of performance. Behavioral objectives are not an unmixed blessing; they can lead to a bias toward trivial - but measurable - goals. On the whole, however, behavioral objectives should have a healthy impact on educational practice. The field of special education, in particular, is in need of clarification of its content and goals. If the accountability movement speeds up this process, it will confer a benefit on children and professionals alike.

In the area of learning disabilities (LD), for example, there is no universally accepted set of specific conditions or symptoms to guide the labeling of children or the provision of special services. It is not sufficient merely to generate a list of categories such as perceptual dysfunction, brain dysfunction, dyslexia, or the like. Such terms do not constitute operational definitions by which to identify children with learning problems, or assign them to treatments. Still less do such terms indicate what those treatments

should be. The purpose of creating LD categories is not simply to place youngsters in them. Rather, we want to recognize that some children have rather specific deficiencies when compared to a desired standard of performance. The standard of performance must be the starting point, and this requires the statement of goals in behavioral terms.

The lack of consistent and more or less universally accepted diagnostic guidelines in LD (and other) programs can be explained perhaps by the relative youth of special education as a field of study. The lack of such behavioral criteria, however, is cause for concern, particularly when well-intentioned legislatures incorporate vague special education terminology into laws, in the mistaken belief that such terms have definite meanings. Thus it is possible for educational and, specifically, accountability legislation to "outrun" the state of the art in special education. While the profession addresses these technical problems through research and development, there is meanwhile a need for professional organizations to furnish advice and information (not mere self-serving advocacy) to legislative and regulatory bodies.

Although I will discuss the special education "labeling" process shortly, it should be mentioned here that the essential need for behavioral definitions in special education is not solely in order to place children into categories. The dead-end labeling or classifying of children is universally condemned, but, unfortunately, is commonly practiced. A more desirable goal is to incorporate behavioral criteria into a diagnostic process in which specific remedial treatments are indicated for particular behavioral deficiencies. The development of sophisticated special education procedures of this kind will involve normative and ethical problems not yet contemplated in most accountability

systems. Behavioral criteria alone are simply not adequate to justify certain treatments, regardless of their success in producing the "desired" behavior. Consider, for example, the use of neurological agents in treating behavioral patterns. The amphetamine congener, Ritalin, has been used to control school children "suffering" from inattentiveness in class and disrespect for authority. Such children have been diagnosed as hyperkinetic, or as having minimum brain dysfunction - but the diagnostic signs of these conditions are not neurological at all, but rather are purely associated with a child's social behavior patterns. If such treatments are used disproportionately among socio-economic and racial groups, these are issues that are essentially political, as well as educational. Special education professionals must show leadership in the analysis of the ethical, as well as the technical, aspects of diagnosis and treatment.

Assignment to Special Education Categories

In regular education, students are placed according to age and subject matter divisions. How are children placed in special education? There is no simple answer to this question, and the matter has not received the study it deserves. In the first place, some special education classes owe their existence, not to educational philosophy or curriculum policy, but to state and federal legislation which established certain financial aid catagories. The temptations created by categorical aid of this type give rise to decisions difficult to incorporate into an accountability system. For example, suppose an administrator in a financially hard-pressed district is aware of special aid available for EMH (educable mentally handicapped) children, and has a student whose test scores, given the test reliability, are marginal; that is, he could rationalize placing the youngster in either an EMH or regular classroom.

What decision is he likely to make? What educational purposes are being pursued or subverted? The profusion of categorical aid and special program classifications in education today make the study of their purposes and effects a matter of great importance - which has thus far received too little attention.

It must be admitted that in general the procedures used to place children into the various special education categories are very unreliable. For example, in assigning students to learning disabilities classes, most schools probably use such indicators as 1) behavior "problems" in the classroom, 2) "immaturity" or other vague differences from age peers, 3) speech which seems less developed than that of age peers, 4) poor motor coordination or attentive behavior, and 5) scores on ITPA, Vineland, Frostig, Goodenough, and Kephart tests. Additionally, there are often other variables at work, such as parents who demand special services for their poor achieving offspring, and force their children into LD categories. A much larger group of parents may simply acquiesce out of ignorance when the school dumps their children into special education categories to get them out of a classroom where they "can't do the work." A third parent group may refuse to allow such placement, and a child who is (or has) a problem is not labeled LD as a result.

These various and unreliable indicators of membership in LD categories mean that the facts and figures can be easily adjusted to "show" almost any desired result, were an unsophisticated accountability system to be imposed on the present unsystematic LD classification system. On the other hand, the same analysis reveals the need for accountability, in a scientific and professional sense, upon which public reporting and accountability in the popular sense can be founded.

Data Gathering Requirements

The previous two sections have indicated examples of several specific

areas in which additional study, and therefore additional data, are needed. In this section, I will make only two more points concerning data requirements for accountability in special education.

First, there is a sizable gap between the data needs for professional purposes in special education, and those needed for public reporting and accountability. The professional study of special education theory and practice requires the increased use of experimental and other rigorous, scientifically defensible, investigative procedures. There is simply no substitute for soundly researched data subject to the scrutiny of other researchers and thoughtful practitioners. On the other hand, and in spite of the rhetoric associated with much of the clamor for "accountability," the actual data demands of most existing accountability systems are quite modest. The public reporting of most school special education programs often can rely on simple group-mean deviations from baseline data, or an analysis of gain scores in achievement, language use, or behavior ratings. The advantages of such simple statistics are several: they are easily communicated to the public, they can be obtained without consuming excessive amounts of class time, and they are within the statistical competency of most field professionals.

Simple statistics often can conceal more than they reveal, however. For example, the use of mean scores by themselves may entail the omission of important information about the shape of the distribution of scores in a group. An educational procedure that greatly improves the performance of low achievers, but not higher achievers, might result in the group mean rising only slightly. Yet it would be an error to conclude, on the basis of the group mean scores, that such a procedure was "ineffective." Thus the acceptability

of simple statistics for many public purposes should not be cause for placing undue reliance upon them.

My second point concerning data requirements is that some data can be downright harmful. In particular, special education must be extremely cautious in the development and use of "predictors" of LD or other behavioral traits. Special education has perhaps a special obligation to avoid self-fulfilling prophecies in the screening or selection of children into categories (whether or not they are also screened into separate classrooms). The placement of children into special categories on the basis of predictive instruments has been used too often to rationalize doing too little with them once they are labeled. The objective of special education programs is to deliver to children the extra help they need in order to correct their difficulties, insofar as this is possible. Meeting this goal will require a statement of criteria in behavioral terms, and a thorough examination of the procedures for placing students into, and out of, special education categories.

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In this brief essay I have sketched a few of the implications of accountability for special education. The immediate, short-run requirements of initial accountability systems probably can be met with relative ease by special education administrators. The longer run, and more profound, requirements for public accountability will require participation by special education professionals in setting the guidelines and expectations for accountability, and in placing special education on firmer scientific and technical foundations.

AN INTEGRATED BEHAVIORAL-SYSTEMS MODEL OF ACCOUNTABILITY FOR EDUCATION

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Viewed as a tool in the educational process, accountability is the regular, if not daily, tabulation of credits and debits, pluses and minuses, successes and failures of all personnel, professional and pupil alike, involved in the learning growth and development of children in school. In the large view, it is the acceptance by the school system of responsibility for success or failure of the pupil in the learning process and its relationship to his successful integration into society as an adult.

Accountability is present in every system whether or not it is recognized as such. If what a teacher or administrator feels accountable for can be determined, it is often possible to determine what the true or controlling goals of that system are. Until recently, public schools have not been delegated distinct responsibility for defining the nature of learning beyond rote learning and the acquisition of facts, nor for the formulating of learning goals as related to analysis, such as synthesizing information. Schools have not examined alternatives to program regularities with any constancy over time, nor have they maintained ongoing evaluation (and proactive responses to the results of that evaluation) of individual and group student progress. Yet all of these procedures are necessary to educational accountability.

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Rationale for Mainstreaming

What is occurring in the mainstreaming movement is not a change in special education in isolation from the total system, but a basic change in education, since special education cannot be realistically changed without affecting the regular education system. One of the major trends in education is toward personalized learning programs and continuous progress curricula conducive to the cognitive, affective, psycho-motor, and perceptual development of all children. The philosophy of developing programs to meet the individual needs of children, while not a new concept, seems finally within the reach of reality. This thrust toward individualization is based on the recognition that:

Children should advance continuously as mastery of essential academic skills is demonstrated;

Children should learn how to learn--how to be self-starting learners;

Children must learn that they can learn;

Children must be protected from constant failure;

Children should learn self-discipline and self-respect;

Children must develop marketable skills and find a measure of satisfaction and pride in employing them.

As teachers become advisors or facilitators of learning, rather than dispensers of knowledge; as personalized learning and continuous progress curricula become observable--when these kinds of changes become a reality in our schools, then teachers will be able to deal more efficiently with the wide degree of variance existing in every classroom of this country, and children with learning, physical, or behavior problems will be able to grow and develop and learn side by side in the regular classroom.

In achieving required changes to serve handicapped children in regular classrooms, there must be a program that will facilitate

1. The development of a positive attitude toward the integration of the handicapped child in the regular classroom among regular students and teachers, special class teachers, support personnel, administrators, and the community;

2. The development and strengthening of skills among regular and special education teachers relating to special education techniques and methodologies, especially those that relate to effective use of pupil assessment data, prescriptive teaching, and individual self-paced instructional programs;

3. The systematic development and adoption of new and varied roles for innovative programming through differentiated staffing patterns for special education teachers.

Rationale for Change in Education

Special education essentially has developed in the schools as a sub- or parallel system to deal with children who did not fit into either the behavioral or programmatic regularities of that system.

> For example, one of the major effects of large-scale testing programs has been to identify behavioral irregularities, remove them from the main system, partially or totally; and place the burden of resolving the irregularities either upon the children, parents, or staff of the sub- or parallel system. Little or no adaptation or modification was made in the program of the main system. In fact, the effect of these mechanisms was to reinforce the behavioral and programmatic regularities of the main system.
>
> Contrary to this approach, [the emerging integrated systems trend] recognizes that the development of the sub- or parallel system is a strategy that has been unfruitful, has created its own set of problems, and is contrary to modern learning theory, instructional strategies, and organizational practices. The [integrated systems approach] emphasizes the development of an adaptive system that is responsive and relevant to the needs of all children; the focus of change is the program regularities of the main system. The burden for adaptation, which, previously, had rested unproportionately upon the child now shifts to the main system. The child is responsible only as one aspect of the environment comprising that system.
>
> This approach calls for an analysis of both the programmatic and the behavioral regularities of the main system. When there is a disparity between a regularity and the stated goals, a change in either the goal or regularity must logically follow.[1]

An accountability model must be utilized that assists planners in the development of new regularities consistent with stated goals, or, in other words, an analysis and redesign of the entire system. Programs

integrating handicapped children into regular education, concentrating only on changing the special education or sub-system, without changing the main system, are doomed to eventual failure.

Sarason[2] indicates that any change that is introduced into the schools will eventually involve some existing behavioral or programmatic regularity. He suggests that it is difficult for school personnel to consider the universe of alternatives for programmatic regularities. By changing the programmatic regularities, the occurrence and frequency of behavioral regularities can be significantly changed with greater payoff. To express it another way, beneficial changes in behavioral regularities, intended by the shift of handicapped children into regular classrooms, will probably not occur without concommitant changes of the program regularities of both the main and sub-systems. The way teachers organize for instruction, the way they interact with children, and the way in which the total school environment has been engineered must be carefully examined to provide effectively for children with a wide degree of variance in behavior or learning.

An Integrated Systems Model of Accountability

This section will outline an accountability model for integrating handicapped children into regular classrooms with emphasis on a systems analysis and design. It might be helpful to outline a simple systems approach.

There are three major components of a system:

1. The input which includes both the controllable (policy) and uncontrollable (environmental) variables;
2. The operations or process (procedures); and
3. The output or product.

The program design or blueprint developed in a systems format reveals essential data to the planner, the manager, and the evaluator.

Special projects, or innovations, can be viewed as a system which transforms the inputs into outputs by the operations or process. Systems conceptualization of the project or innovation provides essential data needed for planning and design of the project, evaluation of what is happening in the ongoing process, and forecasting future effects with greater accuracy.

The total system is a combination of a complex network of interdependent, interrelated sub-systems that provide the enabling resources to the main system. The interdependency of these sub-systems is difficult to analyze apart from a systems approach. Faulty planning, inputs, processes, and outputs of the sub-systems are largely responsible for the failure of many projects to reach their main system objectives, both quantitatively and qualitatively. A project system must involve the participants, staff, and other target population in the total design. A project system that clearly delineates, with as much detail as possible, the input variables, the operations, the sub-systems, and outputs, within a time frame can provide the designer, administrator, and evaluator with precise and usable data.

In identifying and describing the inputs--physical, material, and human--Brinkerhoff[3] cautions that the inputs should be carefully examined to determine if they meet certain criteria (described as pre-conditions), which are essential to the operation of the program. Minimal skills of students, teacher volunteers, or other teacher selection criteria, agreements of personnel to attend training sessions, etc., are examples of pre-conditions. Most project managers do not give adequate attention to the control over inputs, and when pre-conditions are not met, a project from the outset may be shakily launched.

The Discrepancy Evaluation Model

An effective evaluation model that can be overlayed upon a systems design for program development and institutional change is the discrepancy evaluation model developed by Malcolm Provus[4] and described by Brinkerhoff and others.[5] In this approach the evaluation process is seen as an aid to understanding and improvement of programs. Systems analysis provides the vehicle for the evaluator to obtain more precise data regarding the program operations and the changes that might be necessary to improve them, or to reach the goals and standards that have been established. This form of analysis also aids planners and managers in making predictions or forecasts regarding eventual success or failure of a particular program. The Discrepancy Evaluation Model simply compares, on a continual basis, the performance (P) with the Standards (S), with the difference described as the discrepancy (S - P = D). Program change or improvement is viewed in light of gradual approximation of performance to standards.

Standards are pre-established expectations usually developed by project staff and participants which may take the form of specific objectives and goals, but which are basically more comprehensive. In a broader sense, standards should include detailed specifications for such aspects of the system as the quantity and quality of resources to be utilized, the operational procedures, expected behavioral changes, etc. Standards should be developed for every phase of the project. Any discrepancies between performance and standard are reported to the program staff for their use in decision making and possible modification of the system.

In describing the design standards of the Discrepancy Model, Brinkerhoff comments that the design must be complete and comprehensive; it must have face validity; it must have a program compatible with the environment; and it must be internally consistent. He indicates that the operations or processes themselves will form a logical description of the program. If parts or pieces are omitted from the design, it will not be possible to understand or benefit from the total design. The model is based on the assumption that the evaluation activity must result in discrepancy information that will be useful to the staff in making program or process modifications by exercising control over the operations or by changing the design as indicated.

In a new evaluation approach the authors have used in Houston, Texas, teachers and children generate and record the necessary data regarding their performance and other project operations. The evaluator, or watchdog, then monitors the project operation utilizing data compiled by the participants. Therefore, there is little need for standardized tests or for monitors to actively observe classroom behaviors of children and teachers. This procedure also encourages children and teachers to become monitors of their own behavior, with more resultant and lasting changes without external coercion. These data are then analyzed for the administrators who make necessary decisions from alternatives that are generated from criteria previously established by the administration.

In summary, the Discrepancy Evaluation Model is based on the assumption that key staff must employ systematic methods to continually modify a program as a function of the systematic feedback resulting from evaluation.

The Measurement of Behavior - A Traditional Approach

Traditionally, education has tended to group children according to how they performed on a standardized test. Recently, with the advent

of individualized instruction and curricula which focus on criterion-referenced tests, educators are questioning the adequacy of standardized tests for student placement. One of the major criticisms of the testing movement stems from the fact that standarized testing may be an artificial way of measuring children's potential. In attempting to measure changes in children that have occurred during a specified period of time, as the result of a specific treatment, traditional standarized instruments may not be of much use. A more precise accounting and monitoring of student behavioral change is needed. One system both sufficiently exact and general to permit its effective utilization in meeting questions of educational accountability is known as precision teaching. Lindsley says:

> Precision teaching is not an approach;it is an easy, inexpensive system of monitoring daily improvement--not performance, but improvement. Improvement is acceleration; performance is frequency of occurrence.[6]

Such a system is presently being implemented in Houston Independent School District, Houston, Texas. The following is a description of the salient features of a precision teaching system as it is implemented in Houston.

An Integrated Behavioral-Systems Model

In the previous section an Integrated Systems Model for accountability was presented which required a total systems approach to analysis planning design operations, evaluation, and redesign. This system emphasizes the need for:

1. An in-depth analysis of main and subsystems;
2. The direct involvement of staff, participants, and community in the development and ongoing modification of the operations design and evaluation component;
3. The development of alternatives to the programmatic and behavioral regularities of the main and subsystems;

4. The application of a discrepancy evaluation model to evaluate and thereby change the system as needed; and

5. A procedure for precise measurement on a continuous basis of the movement toward the established objectives.

The ultimate goal of these procedures is to develop a program that will ensure that the goals and objectives of the particular project, or system, are reached with consistency and within a pre-established time frame and at a level of proficiency that meets the expected standards. In the final analysis, the behavioral-learning improvement, or changes of the target students, becomes a major variable in the evaluation procedure. This section will concentrate on procedures that can be utilized to measure the changes that occur over a period of time in behavior and learning of students in accordance with the objectives of a particular project or system. To do this, it is proposed that the behavior of the child be conceptualized in a manner similar to the way the system was conceptualized. Presented is a conceptual model and a functional model for analyzing a particular instance of a continuous behavioral process, within a systems framework.

AN INTEGRATED BEHAVIORAL-SYSTEMS MODEL

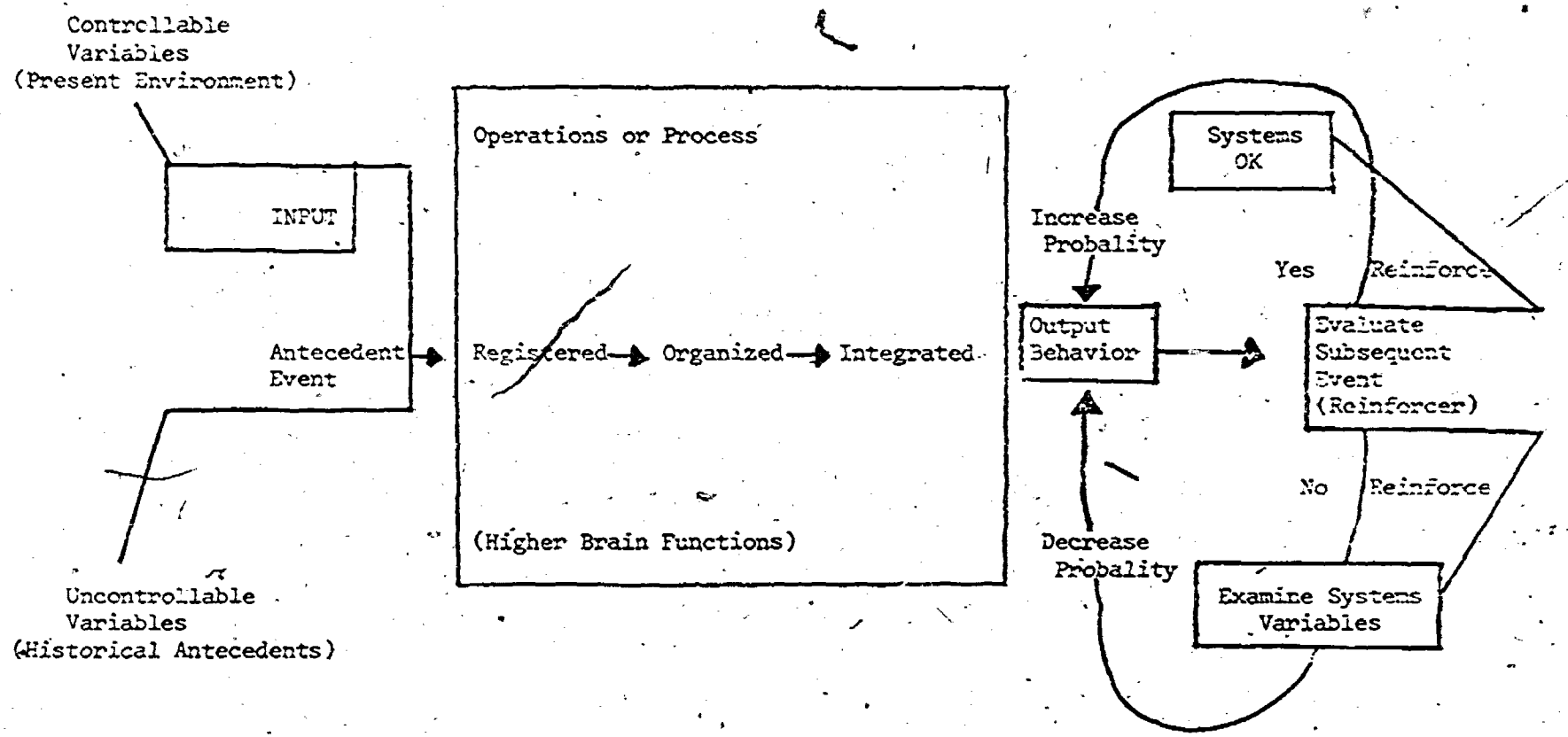

FIGURE I

Figure I shows a diagram of a specific instance of a given behavior. This diagram is called the behavioral equation, which can be conceptualized within the model of systems analysis previously discussed.

The behavioral input is defined as an Antecedent Event (discriminative stimulus) or that which is present before and/or at the same time the child or person behaves. The Antecedent Event is composed of controllable variables (present environment) and uncontrollable variables (historical antecedents). This behavioral input is processed through the sense organs and is organized and integrated by the central nervous system and higher brain functions.

The behavioral output is the specific pinpointed behavior. We have a specific behavioral objective and the aim is to either accelerate or decelerate the behavior toward the desirable objective. The evaluation component is the Subsequent Event (Reinforcer) which immediately follows the behavior and will eventually increase or decrease the probability of the given behavior repeating again in the future.

This conceptual or descriptive behavioral equation allows us to look at every child behaving in the classroom as an independent behavioral system in himself. Once this model is applied to a child, it ceases to be conceptual or descriptive, and becomes functional. What follows is a functional analysis of the behavioral equation.

Figure 2 shows a lesson plan sheet. This plan sheet is the functional application of our behavioral equation. The Program and Programmed Event are the precise specifications of the controllable input variables (i.e., curriculum specifications, classroom description, etc.). The Movement Cycle is the precise description of the pinpointed

behavior with its objectives. The Arrangement and the Arranged Events are the specifications of the Subsequent Event and how it is going to be delivered.

A specific component of this behavioral system can be functionally analyzed by holding all components constant except one. The effects, if any, will be shown in the behavioral output (Movement Cycle). To measure the effects of changing different parts of the system on the Movement Cycle, we rely on a precise tool of recording daily frequencies of behaviors. This tool is known as Precision Teaching. The following section will discuss in detail this system of behavioral measurement.

Plan Sheet # 1 Behavior Johnny Target AX Date 1/28/73 Pinpointed by Mrs. Johnson School Ashford Ele.

Manuscript M
Small Letters D

A, B, C's	Mrs. Johnson	Mrs. Smith	Dr. Perez	classroom
Movement	Manager	Advisor	Supervisor	Location

PROGRAM	PROGRAMMED EVENT	MOVEMENT CYCLE	ARRANGEMENT	ARRANGED EVENT
Ashford Elementary, 1st grade, Bay 4, Mrs. Smith. Open Concept arrangement with learning centers, children arranged in grouping of Red's Blue's, and Yellow's of which Johnny is a member of the Yellow Group.	Monday, Wednesday, Friday from 12:00 to 12:15 p.m. Five (5) students in Group Instruction were given 10 minutes to write the manuscript letters, A, B, C's, on Big Chief Tablet paper with a No. 2 pencil. Letter formation based on Noble & Noble. Johnny's responsibility was to report directly to the writing center, print name on paper, and write A, B, C's from memory on direction.	Upon hearing his name called, Johnny was to stand up, move to Instruction Center, sit down, print name on paper, and on direction write the A,B,C's from memory. He was to work independently without talking, remaining seated. At the end of ten minutes he was to self-correct paper and chart progress of written work by placing a star on the chart posted in the Bay.	If Johnny wrote the letter correctly he was given one point, for a total possible points of 26. Total points were counted and a star was placed on Bar Graph Chart opposite the total number of letters written correctly.	Stars

FIGURE 2

Precision Teaching: A system of Behavioral Measurement

Precision teaching is a theoretically neutral system for measuring human behavior change in natural settings.

In education, the behavior of students is the final authority in any evaluation of effectiveness. Student behavior is the critical dependent variable. Success in instruction will be limited by the success with which this variable is measured.

Precision teaching enables any teacher to do three things:

1. Measure the unique features of the changes of behavior of each learner.
2. Base instructional decisions on empirically determined realities. Make data diagnoses and data decisions about instruction.
3. Discover the functional laws of behavior as they specifically operate now, in the school, with the students.

These features of precision teaching make it possible for any teacher to become free from the potentially tyrannical effects of instructional decisions based on authority, unexamined experiences, prejudice, and irrelevant factors.

The basic unit of the measurement system is frequency. Frequency is a "natural" unit because it recognizes the fact that all behavior occurs in both number and time. Frequency is an important unit of measure in all the natural sciences.

It is the ratio between the number of behavioral units and the number of time units. Specifically it is:

$$\text{Frequency} = \frac{\text{number of movements (defined behaviors)}}{\text{NUMBER OF MINUTES THE BEHAVIOR WAS OBSERVED}}$$

Precision teaching may be organized into seven sequential steps:

1. Pinpoint--define precisely the behavior you are attempting to change.

2. Record--make a written record of both the number of movements and the number of minutes the behavior was observed.

3. Calculate Rates--divide the number of movements by the number of minutes to obtain rate or frequency. Frequency is a most sensitive and generally useful measure of educators.

4. Chart Frequencies on Standard Charts--visual inspection of the charted behavior is the basis for making empirical diagnostic and instructional decisions.

5. Make Systematic Changes--alter the conditions of instruction one at a time in order to discover what is effective.

6. Observe Charts Regularly--in order to maximize the feedback on the effects of your teaching procedures on student performance.

7. Grandma's Law--try, try again. Success is best achieved by repeated systematic changes in the instructional environment.

The standard behavior chart (See Figure 3) has been designed to make it easy to detect and understand changes in behavior and the relationship of these changes to the conditions of the instructional environment. The fact that the chart is a standard chart, using standard charting conventions, makes it possible to communicate behavioral facts with speed and accuracy.

The vertical lines on the chart represent days. The heavy lines are Sundays and the lighter lines in between them are the weekdays. The days may be synchronized with real calendar time by placing the appropriate date in the upper left hand corner and on subsequent fourth Sundays.

The horizontal lines are frequency lines. They are used to indicate the frequency or rate of a movement (defined behavior). The frequency lines are in groups. Each group is called a cycle. There are six cycles on every chart. The bottom cycle tells how many times the movement occurred in a day (1000 minutes). The next cycle higher

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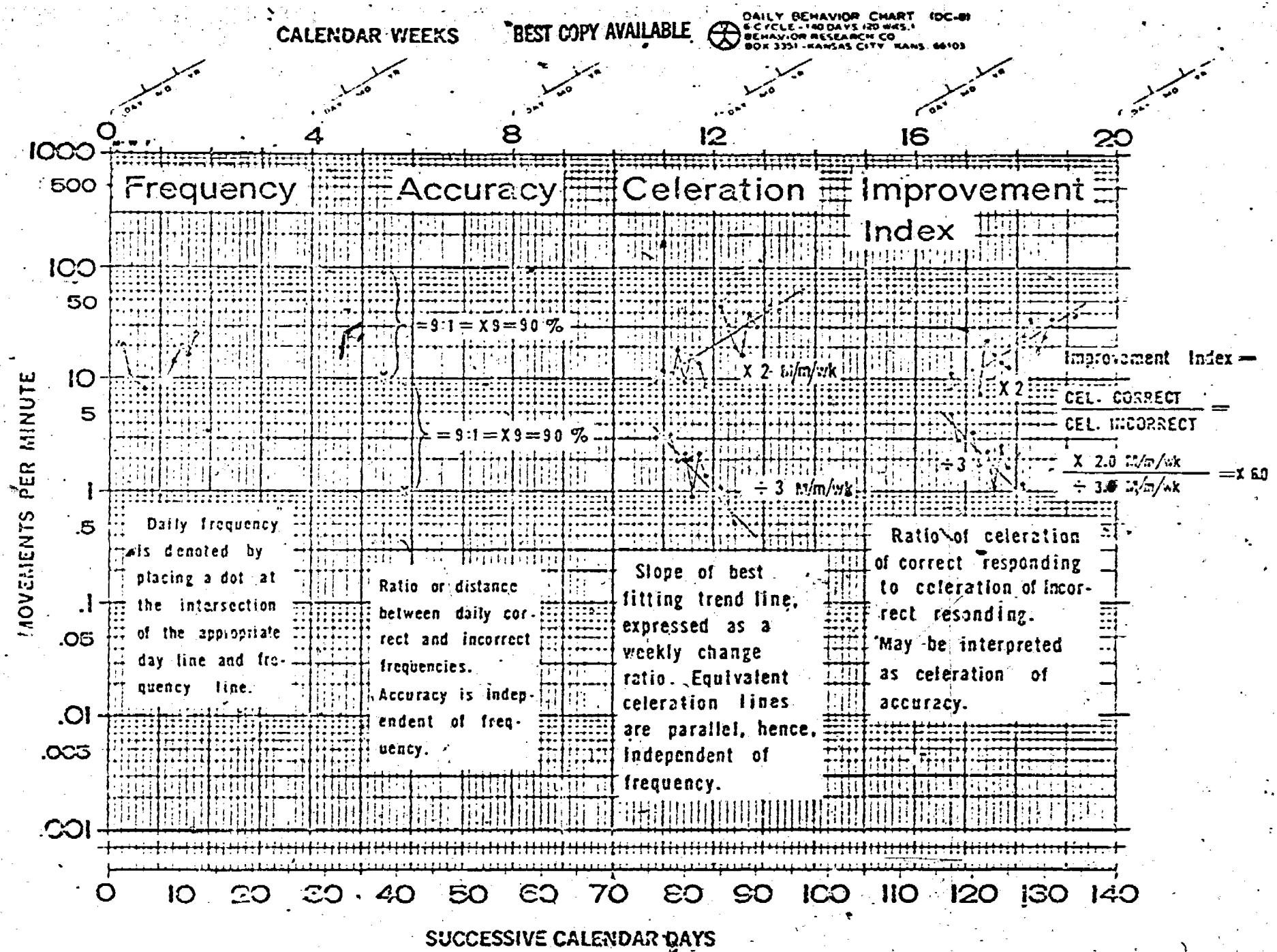

SUPERVISOR ADVISER MANAGER BEHAVER AGE LABEL MOVEMENT

DEPOSITOR AGENCY CHARTER

FIGURE 3

tells how many times the movement occurred in 100 minutes. The cycle above tells how many times the movement occurred in 10 minutes, and the next one tells how many times it occurred in one minute.

The lower three cycles are for movements that occur less than once a minute. The upper three cycles are for movements that are more frequent than once a minute.

After a frequency has been computed for a movement on a particular day, it is represented on the chart by placing it between the two closest frequency lines.

Whenever a change is made or occurs in one or more of the conditions of instruction, a vertical line is drawn on the chart to separate the pre and post change dates. The nature of the change is signified on the chart and explained more fully on a page designed for describing the conditions of instruction.

The conditions of instruction are any and all of the environmental events which a human learner has sensory apparatus to respond to, and which have the potential for changing behavior in an observable way. These conditions may be divided into two general classes. First, those events are usually antecedent to the movement. Curricular material and spoken or written instructions are familiar examples. The second general class of events is made up of all those events which are contingent upon the occurrence of the movement. They are the consequences of behavior. Reinforcers and punishers are two types of contingent consequences. Consequences are subsequent to the movement.

The behavioral equation is a set of symbols which make it convenient to deal conceptually with the conditions of instruction and their relationships to the dependent variable in the equation--behavior. The behavior equation makes it possible for a teacher to manipulate potentially critical conditions of instruction symbolically. The

system may be used to design and permanently record individualized conditions of instruction for each child. This is a technical advance on the usual form of lesson planning. The behavior equation system is analagous to the notation system for chemical reactions.

In contrast to traditional psychoeducational measurement, five separate features of behavior are measured in precision teaching. These separate features of behavior may respond more or less independently to changes in the conditions of instruction. They are:

1. Speed or level--a measure of the central tendency of the frequency; measured by the mid frequency.
2. Celeration--the slope of the line of best fit; measured by the celeration coefficient.
3. Variability--the day-to-day fluctuations in frequency of the movement; measured by the standard error of the line of best fit.
4. Accuracy--the distance between the mid frequency correct and the mid frequency incorrect; measured by the accuracy ratio.
5. Accuracy Trend--indicates whether accuracy is improving, staying the same, or becoming worse over time; measured by the Improvement Index.

Each of the above performance measures are used to describe the behavior within any particular phase.

Precision Administration--An Accountability Procedure

Effective teaching presupposes continuous evaluation. Since the standard behavior chart utilized in precision teaching produces continuous and direct measures of behavior, it is made an integral part of the teaching process. Both teachers and children must therefore become proficient in its use so that it serves to aid individualized evaluation, decision making, and planning. Experience has shown that training in classroom use of the standard behavior chart can be both efficiently and economically accomplished on an inserve basis (e.g., Haughton, 1971; Pennypacker, 1973; Perez, 1973). Thus, the major strategy of precision adminstrators is to introduce the evaluation process at the level of individual teachers' daily interactions with individual children. Giving the evaluation tool directly to the teachers for daily use with children is, then, an effort to maximize the effectiveness of the evaluation process as an integral part of the teaching process. Teachers are accountable to the children they work with and, at the same time, are accountable to administrators, parents, and society in general.

Since a large amount of data will be generated by using the daily charting procedure, it is both possible and convenient to enlist the aid of the high speed computers. The computer can easily digest and store these data to any desired level of sensitivity up to, and including, a single child's performance on a single page of a single arithmetic book on a specified day. By summarizing the data with respect to one or more of the measures of behavior and behavior change, an overall measure of benefit derived from a given program is yielded. This summarization can, of course, occur with respect to any independent parameter of

the program of any subpopulation of the participants in the program. Since all of the behavioral measures taken from the chart incorporate a time dimension, one can readily view any resultant behavior change in terms of the time taken to produce it and thus arrive at a measure of efficiency. Finally, one may add to such statements whatever cost figures are deemed appropriate, thereby providing a quantitative basis for statements of accountability in terms of cost benefit. A major virtue of the system lies in the fact that all such analyses are based entirely on the directly observed and recorded behavior (both academic and social) of the children served by whatever program is being evaluated. The same information which guides the teacher in her daily planning and decision making constitutes, when assembled across the appropriate units of a program, the data base for administrative planning and decision making at any level of responsibility. Such a system virtually ensures that educational decisions and policies are formulated in consultation with the ultimate experts--the children themselves.

Summary:

An integrated systems model for accountability requires:

1. A total systems approach to analysis, planning, design, operations, evaluation, and redesign which assures the specifications of program objectives and establishment of pre-determined standards;

2. Analysis and development of alternatives to the programmatic and behavioral regularities of the main and enabling system, and effective change strategies for implementing alternatives;

3. Direct involvement of staff, participants, and community in the development and on-going modification of the operations design and evaluation component, and in the initial needs assessment;

4. In-depth analysis of the sub- or enabling systems within a time frame, to provide enabling resources to the main system, through such techniques as PERT, PPBS, etc;

5. Application of a discrepancy evaluation model to identify or pinpoint (a) variables needing modification or (b) the development of alternative program approaches, as a function of systematic evaluation feedback. Performance control and cost

effectiveness studies are essential aspects of the process;

6. Teachers, children, administrators, etc., generate and record necessary data regarding performance outputs. Staff and participants become monitors of their own behavior or sub-system programs;

7. A procedure for precise measurement on a continuous basis to measure movement toward established objectives; and

8. Program auditing by qualified personnel external to the system to assess the validity of the procedures for determining system effectiveness.

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TOWARD A MORE SUBJECTIVE APPROACH TO ACCOUNTABILITY

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To understand the concept of accountability, one must become aware of the important distinction between an evaluation program and an accountability system. Evaluation merely seeks to measure the effects of a given treatment, nothing more. It is quite possible to evaluate a mainstreaming program for exceptional children, for example, and never use the findings for any other purpose than to occupy space in a forgotten file drawer. Accountability systems, on the other hand, are designed to make constructive use of evaluation findings. They are referred to as "systems" in order to emphasize their feedback and self-correctional qualities. Although accountability systems may differ in structure, they all address the same basic functions: goal setting; evaluation; feedback; and correction of the original system.

Who Is Accountable to Whom

If a program's goals are students' cognitive development, affective adjustment and growth, increased interaction, rapport, and cooperation between mildly handicapped children and normal children in the classroom, then we must look to all the variables that affect these outcomes. We must avoid making any component of the total system a "scapegoat" for the various other components: administrators must be accountable for their input, parents for theirs, teachers for theirs, as well as giving attention to the input from curriculum materials, etc.

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The purpose of accountability is to help the system approximate its goals, rather than identify its faults. Accountability can be used to identify the strong areas of the system and enhance its effects as well as to identify weaknesses, so that remedial action can be taken.

This points to the need for analytical capabilities within the accountability system. The system should not only identify the effects, but also point to the processes which bring about those effects, and provide tools by which probable improvements can be identified.

The sum total of this view of accountability is that accountability is a constructive process of evaluation, feedback, and improvement. Each component of the system must be accountable for its affect on the children and must be continuously improved in order to increase its beneficial effect.

Accountability as a philosophy, can be interpreted as a move away from the competitive survival-of-the-fittest approach to teaching. In a modern accountability system there is no rejection of those students who fall below the norm or "fail." The focus is not on measuring and labeling students in order to differentiate those who succeed from those who fail, but rather to help each student succeed--success being defined as significant improvement and cognitive knowledge in skills, affective growth, social integration and adjustment, self-image etc.

The relationship between an evaluation program/accountability system and an instructional program is a delicate one. The evaluation program must be continuous and must provide useful feedback for the participants in the educational program, yet it must not interfere with that program in any detrimental way. In other words, accountability must not become the tail that wags the educational dog. Those who design the accountability system must be aware of this important balance and aware of the trade-offs involved.

Costs vs. benefits in the use of teacher and student time for testing is one such trade-off. As long as the testing is beneficial to the instructional system - that it provides meaningful diagnostic and evaluative data which can be used to improve instruction - it is legitimate to use it for evaluation purposes. When the evaluation procedures cut into needed instructional/learning time, they must be questioned, and careful consideration given to the importance of evaluation as opposed to instructional/learning.

Distortion of the instructional/learning system can occur if the type of evaluation employed is incompatible with that system. When objective tests measure only a few of the skills taught in an instructional program, or even a different set of skills than those involved in the program, yet the results of such tests are fed back to teachers and students, a false sense of success or failure will result.

A similar effect can occur when the accountability system encourages certain rewards and punishments for certain overt behaviors, like free movement about the classroom or talking among students. It is well known that children need a certain amount of mobility and that learning is enhanced, in certain situations, when talking is permitted. When these things are entirely frustrated, psychological tension mounts and students become either hostile, or depressed and passive. Yet a poorly conceived evaluation based on simple frequency counts of "talking out of turn" and "getting out of one's seat" can demonstrate a program's increasing success while it is destructive of other educational and humanistic goals of the program.

Regardless of the enthusiasm of the evaluators or accountability system designers, and regardless of the demands made by monitors, program directors, governing board members, parents, etc., it is not healthy or productive for the evaluation program/accountability system to overpower the instructional system.

Whenever a conflict exists between these two functions, the instructional system should be favored. After all, that is what education is all about.

Goals for Students in a Mainstreaming Program

In programs that attempt integration of exceptional children into the regular classroom, at least three kinds of student outcomes need to be considered in any evaluation design:

The learning performance of the exceptional children in the mainstreamed class. This should be measured against a baseline of previous performance in the isolated situation, thus offering a comparison between the two arrangements.

Measurement of self-image and social integration of the exceptional children in the normal population of the regular classroom. The kinds of behaviors and attitudes measured here are not cognitive in nature. They are the degree and kinds of social interactions between normal and exceptional children and, in particular, changes in their self-concepts, both negative and positive.

The performance and attitudes of acceptance on the part of the normal children in the classroom. Here we would measure such things as changes, if any, in the cognitive performance of normal children that might result from the teacher robbing time from them in order to focus on remediation of exceptional children's problems. This part of the evaluation would include measuring the attitudes of the normal children toward the exceptional children; the degree and quality of their acceptance (incidence of teasing or stereotyping, expressions of friendship, goodwill, etc.), and any qualitative changes in the attitudes of the normal children toward exceptional children (e.g., to be different is alright; that a deficiency in one area of cognitive performance does not debase the total personality or value of a person, etc.). The evaluation/accountability design would seek to demonstrate those behaviors of peer help and peer tutoring that could be measured by frequency counts, and make observations on the quality

of the interaction between children (e.g., does the interaction focus only on cognitive tasks or is it also social and friendly and takes place on the playgrounds, in the halls, at lunch, etc.).

Objectivity vs. Subjectivity in Evaluation of Mainstreaming Programs

Because of the strong emphasis on training, accountability programs for exceptional children have tended to be framed in terms of cognitive development and have employed behavioristic techniques. In certain techniques, precision teaching for one, there is a tendency to focus on overt expression of cognitive growth. For example, frequency charts are kept on "correct" and "incorrect" verbal output - which means the number of correct answers, or rehearsals of memorized material the child can produce to a given stimulus like a question, or instructions to recite the multiplication tables. These programs also measure conformity to classroom rules, i.e., the number of times the student speaks out of turn, the incidence of tardiness, the frequency of angry exchanges between children, etc. When behaviorism is applied to human learning and growth its effect is almost always reductionist - it focuses on short-term, easily demonstrable, and sometimes trivial objectives. After all, it is very difficult to keep a frequency count on subtle changes in self-image, or on a number of other important kinds of growth that are not immediately demonstrable.

Educators who have embraced the "open classroom" approach to instruction are asking for evaluation programs/accountability systems that take into account these more difficult kinds of measurements. They emphasize affective growth and cooperative work initiated by the child following his/her own motivations. This philosophically based methodology presents problems to those who wish a strict accounting. Means must be found to develop accountability within this framework.

The disagreement between those who advocate strictly objective evaluation

based on overt behavior, and those who will accept subjective "soft" data has roots in a long-standing disagreement between professional philosophers. The logical positivists insist that truth can be established only by rigorous experimental procedures which yield observable and reliable data. This philosophy has been adopted by behaviorist psychologists who will accept only overt behavior as data, and who usually measure the frequency of occurrence of the behavior in their experiments. Other philosophers are willing to accept more subjective evidence, such as reports of feelings, as means of establishing truth. Or they are amenable to logical arguments. These views have their counterpart in phenomenological, gestalt, and personality psychology, all of which allow for many kinds of subjective data. The phenomenologists are willing to accept less rigorous, "soft" data in order to study learning processes, or behavior in all its natural richness and complexity.

The behaviorists admit as evidence only those changes that can be objectively measured (through frequency counts of overt behaviors). The loosest kind of data they might admit would be observations by a variety of observers, when interrater reliability can be shown to be high. The behaviorists are loath to accept subjective judgments, particularly when those judgments are made by participants like the teacher or students. They show little interest in the intervening variables of self-image, attitudinal changes in learning, heuristic learning, etc., because these are difficult to define and objectify, and their measurement must necessarily be subjective--either by report from the learner himself, or by the interpretation of one closely involved in the learning situation like the teacher.

The humanists, by contrast, place a high value on measurement of the intervening variables. They claim that the learning processes or heuristics are much more powerful than the learning of mere facts or isolated skills.

They believe that subtle, internal, longitudinally developed attitudes like self-image are of much more importance in the overall growth and development of a child, than the mastery of any isolated group of skills. Indeed, they believe that the long-term development of the child depends upon his gaining a sense of mastery, self-worth, and internalized motivation to learn.

In his article, "Objectivity vs. Subjectivity in Educational Research," Michael Scriven argues that subjective reports are not only legitimate, but may be the only way in which important variables in the educational experience can be measured. He points out that in a social-intellectual process like learning there is no "objective" instrumentation such as one finds in a field like physics. We have no oscilloscope of the mind or bubble chamber to trace the paths of newly spawned ideas. He points out that a well-trained mind is the most sensitive instrument available to a social scientist. A keen and sensitive observer is more likely to be truly objective, in the sense of accurately measuring the effects of a particular treatment of the program, than would be a measurement by "objective" frequency counts of overt behaviors. The frequency count also is made by an observer, but in this case he has drastically limited the data that he will attend to in order to gain interrater reliability.

But the most important argument in favor of subjective measurement revolves around the richness of such measurements. Behaviorists find it terribly difficult to objectify and measure simple attitudinal states like happiness, frustration, and anxiety, but even a young child can discriminate these states quite easily when they are occurring within his own nervous system. With a little probing he is able to report his emotional state quite accurately.

A teacher, after working with a child for some time, can usually gauge the changes in attitude better than any "objective" observer who is restricted to the use of frequency counts of overt behaviors. Here the question of teacher prejudice and/or self-deception may be raised. However, outside observers with clinical training, or with operational descriptions of the attitude states, learning processes, or goals in question can be called upon to verify the teacher's subjective observation.

The preceeding arguments are not intended to rule out the use of "objective" measurements through frequency counts of overt behavior. They certainly have a prominent place in any comprehensive evaluation/accountability system. But they must be applied to those limited areas of cognitive growth and behavior control to which they are appropriate. They must be richly supplemented by subjective observations, including observations by those immediately involved in the teaching/learning situation like students, paraprofessional aids, and teachers, as well as observations by trained professionals like clinical psychologists.

Neither are these arguments intended to discount cognitive growth as an important goal. But they are offered as a caution against the narrow acceptance of this goal as the only goal of an educational system. Placing too large an emphasis on external control results in de-emphasis of self-initiated work. Stressing curriculum content, the mastery of which can be easily demonstrated, e.g., recitation of the multiplication tables to the exclusion of less easily measured developments in insight and esthetic sensibilities ultimately does a disservice to the child. Education must be a process which facilitates balanced growth to all aspects of the child's life.

The ideas presented in this short paper are offered only as a rationale for a more humanistic and subjective approach to accountability. They suggest that the goals must be broadened, that objectives and evaluation systems must be formulated to account for the special goals of mainstreaming programs. They also suggest that accountability systems should be designed to be compatible with and reinforcing to the instructional system.

FOOTNOTE

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AFTERWORD

Many of the ideas expressed herein are commonplace in relation to "normal" children. They are radical in relation to the handicapped child, because people have not assumed that exceptional children are learners and contributors to a positive atmosphere in the classroom. We have seen evidence to the contrary.

This is a plea for the Self. Self-renewal; self-evaluation; self-direction - all necessary for teachers and students to experience growth and learning together.

> People, whether adults or children, succeed to the degree to which they exercise control over their own destinies and contribute to the life of the group.*

This is a plea for progress - for generosity in the face of failure, for confidence that, through the configurations of change, new behaviors, ideas, skills, and mysteries will emerge to enhance our lives.

> . . . a person is a fluid process, not a fixed and static entity; a flowing river of change, not a block of solid material; a continually changing constellation of potentialities, not a fixed quantity of traits.**

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* Beery, Keith, personal communication.

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REVIEW OF THE LITERATURE

Robert Farrald*

Historically, educators have desired a truly personalized instructional system - one that recognized each child as having his own liabilities and assets, his own learning style, his own goals, and his own potentialities. Educators have been obsessed with the idea of failure-free schools - schools that would maximize emotional robustness and social sturdiness, while facilitating intellectual and academic development. Yet an individualized instructional program for each and every child remains elusive. In spite of the obsession with failure-free schools, our educational institutions do, as Rubin (1969) points out, represent a "gigantic selective mechanism" for society, an "agency of negative credentialism"[1] which certifies the children of poor citizens as socially inferior and intellectually less capable. The Coleman Report (1966) documents education's failure to serve as a vehicle of upward social and economic mobility, presenting voluminous evidence to support the view that we have created a racist school structure that violates the very democratic principles upon which our educational system is based. Green (1972), after a thorough study of school records, surveys, and census reports, concluded that American schools have failed to teach about 40 percent of the children entrusted to them during the past 70 years.[2] Leon Lessinger (1970) expresses

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the dilemma of education:

> If one airplane in every four crashed between takeoff and landing, people would refuse to fly. If one automobile in every four went out of control and caused a fatal accident or permanent injury, Detroit would be closed down tomorrow...[yet] our schools--which produce a more important product than airplanes or automobiles--somehow fail one youngster in four.[3]

"Special education" has historically been one of the panaceas for coping with individual differences and school failure. Yet, in recent years, the efficacy of special education has been questioned and many of its policies and practices criticized. Indeed, some critics contend that many aspects of traditional special education programs are not only ineffective and inefficient, but also undesirable or even harmful. The questions and criticisms posed by the detractors of current special education practices must receive immediate attention and careful thought. Mere opinion, guess work, personal bias and/or eloquence will carry little weight, if the efforts of special education are weighed in the balance and found wanting. Decisions regarding current practices and proposed changes must be based upon carefully collected and well-integrated facts - facts concerning efficiency, economy, and effectiveness in terms of the human beings we wish to educate.

Rationale for Special Class Placement

For many educators "special education" is analogous with "special class placement." Educators have attempted to reduce school failure and improve quality by trying to create classrooms that were homogeneous, i.e., classrooms created on the basis of some grouping technique that would minimize individual differences among the children to be taught. Efforts to decrease heterogeneity have resulted in the removal from the mainstream of education various groups of children

labeled "mentally retarded," "emotionally disturbed," "educationally handicapped," etc. Advocates of special, segregated classes have postulated several hypotheses to support their position:

Regular classes cannot adequately meet the needs of exceptional children.

The mainstream curriculum, teaching strategies, and instructional materials are all inappropriate to the unique learning characteristics of "special" children.

The span of individual differences in any given regular class, and the overwhelming burden created by the numbers of children assigned to each regular class teacher, prevent the necessary individualization of instruction so crucial to meeting the needs of children with handicapping conditions.

Peers and teachers alike are negative and rejecting in their attitudes toward children who are different.

Regular class teachers do not possess--nor are they willing to acquire--the knowledge or the skills necessary to adequately teach "exceptional" children.

Special, segregated classes can, on the other hand, effectively meet the needs of exceptional children:

Special classes provide a specially trained teacher with a unique combination of skills which allow her to be more positive and accepting in her attitudes and more capable of individualizing instruction.

Special education teachers are more competent in providing a special curriculum appropriate to the real life needs of the children, and a unique repertoire of teaching strategies and instructional materials devised expressly and scientifically for the exceptional youngster.

Because special classes group children according to the type of disability, and because class size is limited, an instructional program that is highly personalized is thereby insured.

Because special classes are homogeneous and the teacher is warm and accepting, they provide a healthier context for social and emotional development.

Ultimately children taught in special classes will achieve a higher and more fruitful level of adjustment in the social and vocational aspects of the "real" world.

Findings of Efficacy Studies

The various assumptions inherent in the promise of special class placement have been questioned by special educators themselves.

Critics of special, segregated classes range from very mild and conservative to very sweeping and radical. Siegel (1969), while admitting that special classes may have produced several fine by-products such as organizational patterns, deeper knowledge and insight, better diagnostic procedures, and better teaching interventions, believes that many "marginally exceptional" children - whether mentally retarded, brain injured, or emotionally disturbed - may be educated in the regular class if - and only if - the regular class teacher is given appropriate training and orientation. This position has been supported by Kirk (1950), Wooden (1953), and Cruickshank (1958).

Other more recent critics are harsher in their criticisms and more insistent that change occur immediately. In Dunn's view (1968), "...much of our past and present practices are morally and educationally wrong." He notes that special educators

> ...have been living at the mercy of general educators who have referred their problem children to us [and that] ...we have been generally ill prepared and ineffective in educating these children.[4]

Dunn's solution is that we

> ...stop being pressured into continuing and expanding a special education program that we know now to be undesirable for many of the children we are dedicated to serve.[5]

Dunn's survey of the literature pertaining to segregated classes caused him to conclude that special class placement was essentially damaging to the children who were isolated and that certain retarded children make better progress in the regular classes.

Johnson (1962), after a very thorough review of available data, suggests that:

> It is indeed paradoxical that mentally handicapped children having teachers especially trained, having more money (per capita) spent on their education, and being [enrolled in classes with few children and a program] designed to provide for their unique needs, should be accomplishing the objectives of their education at the same time or at a lower level than similar mentally handicapped children who have not had these advantages and have been forced to remain in the regular grades.[6]

Lilly (1970) notes that consideration of available evidence and expert opinion leads to the conclusion ". . . that traditional special education services as represented by self-contained special classes should be discontinued immediately for all but the severely impaired."[7] Deno (1971) argues that special classes and the tendency to meet the problems of heterogeneity via segregation are "fed by the natural tendency of any organization to get rid of what makes attainment of its goals difficult. . ."[8] While Anderson (1971) believes that segregated classrooms evolved when

> . . . regular teachers in regular classrooms who could not cope with the irregular behavior of children dissatisfied with their learning environment shifted them to special schools and classrooms, convincing themselves that the isolation was for the student's own good.[9]

For Trippe (1971)

> . . . the special education program represents a convenient acceptable way of abdicating responsibility while appearing to be in the best interest of the children.[10]

Emprirical Studies on Effects of Special Classes for EMR Children

The problem of evaluating the efforts of special education and the outcomes of special, segregated special class placement has been shamefully neglected. Much current practice is based upon opinion, and available data are characterized by a lack of certainty and by empirical vagueness. Nearly all studies thus far completed suffer from serious methodological weaknesses. The negligible or inferior academic performance of EMR children educated in special, segregated

classes has been verified by a long list of studies (Bacher, 1965; Baldwin, 1958; Blatt, 1958; Cassidy and Stanton, 1959; Diggs, 1964; Elenbogen, 1957; Goldstein, Moss and Jordon, 1965; Kern and Pfaffle, 1962; Mayer, 1966; Thurstone, 1959). Several studies seem to indicate that those children educated in a special class make greater gains in social and/or emotional adjustment (Baldwin, 1958; Blatt, 1958; Cassidy and Stanton, 1959; Elenbogen, 1957; Thurstone, 1959).

Jordon (1961), as a result of a sociometric study of 349 secondary special class children, found that the structure of the social relationships in special classes tends to be very similar to that of regular classes and concluded the EMR children tend to have the same relative social position, regardless of class placement. Blatt's (1958) study suggests that the evaluative instruments employed (and the corresponding variation of dysfunction in social and emotional adjustment) influence the data evolving from research studies, and indicates that conclusions regarding any superiority of special class children in terms of social/emotional adjustment be viewed with caution. Other studies (Goldstein, Moss and Jordon, 1966) yield data that indicate that EMR children educated in the mainstream make greater gains in social/emotional adjustment. Carroll (1967) found EMR children in partially integrated organizational settings made significantly better gains in self-concept than did EMR children educated in special classes.

Empirical Studies on the Effect of Special Class Placement for Emotionally Disturbed Children

Several efforts have been made to evaluate basic assumptions underlying special classes for the emotionally handicapped. Whelan (1966) found that emotionally disturbed children in special classes assigned

more positive meanings to school, self, and family-related concepts than did emotionally disturbed children in regular classes. Rubin, Simson and Betwee (1966) concluded that special classes do not produce results significantly different from regular classes. Vacc (1968) attempted to measure change in achievement and overt behavior of emotionally disturbed children in special and regular classes. Resulting data indicated that emotionally disturbed children in special classes demonstrate superior achievement and superior gains in social and emotional adjustment.

A second study by Vacc (1972) is of special interest because his basic premise was that the policy of special class placement can be properly evaluated in terms of the degree to which the child's improvement, resulting from special class treatment, is maintained after his return to the regular class. Thus, Vacc compared children placed in special class two years after they had returned to the regular class with children (matched on the basis of intelligence, chronological age, grade placement, achievement level, social class and diagnosis of a supervising psychologist) who experienced no special class placement. He summarized his data as follows:

> ...it can be concluded that the data from this study support the notion that emotionally disturbed children who did not receive special class intervention are accomplishing the objectives of academic achievement, overt behavior change, and social position at the same level as children who did have the advantage of special class placement.11

Morse, Cutler and Fink (1964) concluded that special class placement for the emotionally handicapped is frequently a dead end - an

educational death sentence. They also found that follow-up data on those children who were, in fact, reintegrated were practically nonexistent. Grosenick (1970) found that with proper preintegration training and appropriate postintegration follow-up, children could successfully be reintegrated into the mainstream without loss of gains made during the special class placement period, and without adversely affecting those children already enrolled in the regular class. Indeed, significant improvement occurred after reintegration. Grosenick notes that successful reintegration is impossible without: (a) careful preintegration preparation in those basic academic and behavioral skills crucial to survival in the mainstream; (b) careful assessment of the child's readiness to return to the regular class; (c) extremely good communication and cooperation among all persons responsible for the child's educational and emotional welfare; and (d) careful and thorough follow-up.

Relationship Between Special and Regular Education

Ernest Siegel (1969), an early pioneer in "mainstreaming," was among the first to question the policy of "special classes for special children" and the validity of a compartmentalized view of special versus regular education. He noted that "...by definition as well as by philosopy 'special education' can be undertaken in the regular class."[12] Siegel's writings seem to imply that "special education" consists merely of a series of intervention or organizational strategies that might be utilized to varying degrees within the general framework of regular education. Cain (1970) notes that you cannot separate a specific problem of education - such as mental retardation, emotional disturbance, or cultural divergence - from the total

school environment. The President's Committee on Mental Retardation (1972) postulates that mental retardation (and by inference other handicapping conditions) is merely one of the symptoms of our ill society, and that the total educational system is inexorably entwined with the social, economic, and political systems. This concept relates to the finding that many children labeled EMR are "retarded" only in school. At home, among the children in their neighborhood, these children function normally.

Why then, in view of the lack of supporting evidence, do special, segregated classes continue to flourish? There is, of course, much evidence to support the charge that special classes represent a territorial imperative, and that certification requirements for special teachers merely reflect an attempt to establish and protect vested interests. Farrald and Schamber (1973) suggest that segregated classes continued to flourish as a result of the educators' refusal to abandon an enterprise in which they have invested so much time and energy. Johnson (1969) views special education as "...part of the arrangement for cooling out students." According to Johnson, the plight of the black (and by implication other minority groups, including the retarded, etc.) is "...a direct result of the regular school's failure to cope with individual and collective differences in learning and conduct."[13] Seemingly, it is easier to erect a parallel but segregated system than it is to change the regular system so that it accommodates itself to the individual needs and characteristics of children.

Growth for Teachers

Teachers, as well as children, may be shortchanged as a result of their isolation from certain kinds of children. There is evidence to support the charge that a policy of segregation diminishes the regular class teacher's ability to accept and accommodate individual

differences. Waleski (1964) notes that classroom experience with blind and deaf children provides a learning laboratory for the regular class teacher. The mainstream teacher, when confronted with the special needs of an exceptional child, is forced to analyze her methods and strategies. Such a teacher also gains a greater appreciation of and/or tolerance for exceptionality. She becomes more sensitive to individual differences, more patient, adaptable, and confident. Haring, Stern, and Cruickshank (1958) concluded that teachers in daily contact with handicapped children tend to be more responsive, more tolerant, and more committed to meeting the individual differences of children. Teachers without daily experience with handicapped children, on the other hand, tended toward attitudes of rejection rather than acceptance. They tended to be both more anxious and threatened by the implied process of integration. Teachers, then, when deprived of the opportunity to teach exceptional children, are restricted in terms of their opportunities for professional growth. Such teachers lose an opportunity to face challenge and responsibility for children entrusted to their care.

It seems safe to assume that any limitation placed upon the teacher's opportunity for professional growth creates a corresponding restriction upon the child's growth. Adelman (1971) hypothesizes that

> ...the greater the teacher's ability to personalize instruction, the fewer will be the number of children in her classroom who will exhibit learning or behavior problems [and] the poorer the teacher's ability to personalize instruction, the greater will be the number of such problems.[14]

Available data seem to indicate that teachers who refuse to accept responsibility for "exceptional" children also tend to avoid the responsibility inherent in the very concept of personalized instruction.

New Solutions Needed

Fundamental and basic changes are needed to overcome the inflexibility and rigid practices of the past, and educators must seek out alternatives to the policy of special, segregated class placements. In the words of Leo Buscaglia

> . . . There are thousands of beautiful gradations between this choice and that choice. There are discoveries and new ways of doing things that we haven't even dreamed about.[15]

We must seek new administrative plans. We must become solution hunters, since only through creative problem solving will we be able to generate a truly "special" educational structure that embraces all children as a part of the mainstream and views each child as unique. Great good can evolve from the simple rejection of archaic assumptions, from the recognition that things we have long thought to be true are false, and from subjecting our current practices and beliefs to frequent and critical appraisal.

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A study comparing three groups of retarded children attending a special class, regular classes, and regular classes plus an itinerant teacher. Results indicated that all three groups made progress in educational achievement in a one-year period but no significant differences were found in behavior or social adjustment.

Barngrover, E. — "A Study of Educator's Preferences in Special Education Programs," Exceptional Children Vol. 37, No. 10 (Summer 1971), pp. 754-755.

A survey of the opinions of 50 teachers, administrators, and school psychologists revealed that 27 favored continuing the present program of special classes and 23 advocated placement in the regular classroom with special provisions to help integrate the exceptional child. Although the classroom teachers more often favored the retention of special classes, the nonteaching educators tended to prefer regular class placement of exceptional children.

Beery K. — Models for Mainstreaming. San Rafael, California: Dimensions Publishing Company, 1972, 122 pp.

Author views the history of special education classes as the original laboratory for many of the individualized teaching techniques now in demand by regular classroom teachers. He believes both special education and regular teachers have as much to gain from classroom integration as their students do. Included are a short discussion of the author's Project Catalyst and brief reviews of successful examples of integration. Team-teaching and peer and cross-age teaching have proven of great value to normal as well as handicapped children and are highly stressed, as is the belief that schools should be growth-promoting for teachers as well as students and that diversity encourages growth far more than homogeneity.

Birch, J. and Stevens, G.D.

Reaching the Mentally Retarded. Indianapolis, Indiana: Bobbs-Merrill Co. Inc., 1955.

A booklet designed to assist the regular class teacher working with the mentally retarded. Content includes the following topics: teachers' attitudes, identification and diagnosis, parent involvement, common problems and misconceptions, and teaching strategies for primary, intermediate, and high school students. A list of instructional materials, references, and a bibliography are provided.

Blacklaws, P.

"The Slow Learner in the Comprehensive School: Inclusion versus the Special Group," in Forum for the Discussion of New Trends in Education Vol.12, No. 1 (1969), pp. 21-24.

Author feels that the educational needs of the mildly retarded are two-fold: emotional security and an integrated language-thought teaching program. Whether the child is placed in classes of mixed ability, or the special class depends on which alternative will best meet his individual needs, with reference to the teaching talent available. Those who favor special class placement assume special education teachers have the necessary skills to best meet the child's needs.

Boekel, N.

"The Influence of Teacher Expectations on the Performance of the Educable Mentally Retarded: A Teacher's Point of View," Focus on Exceptional Children Vol. 1, No. 4 (1969), pp. 6-10.

Author feels that the most successful teachers of the mentally retarded are characterized by optimism and confidence in themselves and their students. The more that is expected from a retarded child, the greater his motivation and achievement. Recommended teaching strategies include rewarding attempts at self-expression, planning activities that will insure success, and exposure to humor.

Brabner, G.

"Integration and the Special Class Administrators," Journal of Education No. 147 (Oct. 1964), pp. 105-110.

A discussion of the special education administrator's responsibility to provide accurate information about the handicapped, in order to reduce conflicts that may arise as a result of attempting to integrate the retarded with the regular school program. Emphasis is placed upon the administrator's ability to maintain an open minded professional viewpoint in considering segregation versus integration.

Bradfield, R. Brown, J. and others

"The Special Child in the Regular Classroom," Exceptional Children Vol. 39, No. 5 (Feb. 1973), pp. 384-390.

Three educable mentally retarded children who had previously been placed in special self-contained classrooms, were integrated with 22 nonhandicapped children in a third grade class during the first year of the North Sacramento Model Program, in Sacramento, California. A precision teaching procedure was used. Results indicate that the handicapped and nonhandicapped children in the integrated setting improved as much or more than their controls in academic skills, social behavior, and attitude change.

Brooks, F.L. "The Story of Room 000," Journal for Special Educators of the Mentally Retarded Vol. 6, No. 2 (1970), pp. 127-129.

This article presents a strategy for eliminating the stigma of the special class and integrating the EMR population into the total school program by abolishing the self-contained class and placing EMRs in grades with regular students. Resource rooms staffed by special education teachers would be established to teach the skills of learning, and the identification of students for resource rooms would be by achievement rather than I.Q. alone, which would include admitting slow learners as well as EMRs.

Brown, L.F. "The Special Class: Some Aspects for Special Educators to Ponder," Education and Training of the Mentally Retarded Vol. 3, No. 1 (1968), pp. 11-16.

The author feels that the reality of special classes does not line up to our assumptions about them such as: 1) individualized instruction, 2) highly trained teachers, 3) close supervision by directors, 4) homogenous grouping, and 5) opportunities for leadership roles. He concludes that since we do not know how effective special classes could be, it is wrong to condemn the system before implementing the assumed conditions.

Bruininks, R. and Rynders, J. "Alternatives to Special Class Placement for Educable Mentally Retarded Children," Focus on Exceptional Children Vol. 3, No. 4 (1971), pp. 1-12.

The author re-examines certain persistent assumptions about the nature and purpose of special education, and calls for the development, implementation, and evaluation of a range of viable alternatives. Several examples of programs which present contrasting alternatives to special classes are discussed.

Budoff, M. "Comments on Providing Special Education Without Special Classes," in Studies in Learning Potential Vol. 2, No. 25, Cambridge, Mass.: Research Institute For Educational Problems, 1971, 16 pp.

Author feels that we must develop a broader set of educational alternatives for the educable mentally retarded than the dichotomous regular or special class placements. Integration is actually an administrative or organizational solution with no clear implication for instructional content. It is imperative that psychologists change their roles as testers and counselors to learning facilitators, or engineers, in the broadest terms. The quality of a special education program will depend upon the number of alternatives available to meet the needs of the mildly handicapped child.

Burden, R. "A Truly Comprehensive Education?" Special Education Vol. 58, No. 4 (1969), pp. 11-14.

A unique study in which a group of EMRs attended and successfully completed courses at a community college. Results indicated that their major difficulties were problems of integration and seeking assistance. It was implied that their former experience in a special class had limited their ability to integrate with normals successfully.

Butefish, B. and Mattson, B. What The Researcher Says About Teaching the Educable Mentally Retarded in the Regular Classroom. Lubbock, Texas: West Texas School Study Council, 1965, 73 pp.

A practical teaching guide designed to assist regular class teachers with educable mentally retarded children in their classrooms. Included are sections dealing with the characteristics and identification of the mildly retarded, educational objectives, teaching methods, student evaluations, and a bibliography.

Carriher, W.R. A Comparison of Post-School Adjustments of Regular and Special Class Retarded Individuals Served in Lincoln and Omaha, Nebraska Public Schools. Nebraska State Department of Education, Lincoln Office of Education, Wash., D.C.: DHEW, 1957, 186 pp.

This study compared the post-school adjustment of retarded persons who had been taught in special classes with those who had attended regular classes. Employment, sociological, and parental information revealed that the subjects from both groups were described as having made satisfactory adjustments in the community. Implication is that most mildly retarded individuals adjust fairly well to society regardless of the nature of their previous educational experience.

Cassidy, V.M. and Stanton, J.E. An Investigation of Factors Involved in the Educational Placement of Mentally Retarded Children: A Study of Differences Between Children in Special and Regular Classes in Ohio. U.S. Office of Education Cooperative Research Program, Project No. 043,19 Columbus, Ohio: Ohio State University, 1959, 104 pp.

Compared 94 retarded children in regular classes in Ohio with children in special classes in other cities. Results indicated the retardates in special classes were superior in social adjustment but inferior in academic achievement, which seems to be a reflection of the goals of the special class teachers.

Cegelka, W.J. and Tyler, J.L. "The Efficacy of Special Class Placement for the Mentally Retarded in Proper Perspective," Training School Bulletin Vol. 67, No. 1 (1970), pp. 33-68.

A review of related studies, issues, and considerations regarding the most efficacious placement of educable mentally retarded children in the public schools. Suggestions for additional viewpoints of the problem are also included.

Chaffin, J.D., Spellman, C.R., Regan, C.E. and Davison, R.

"Two Followup Studies of Former EMR Students from the Kansas Work-Study Project," Exceptional Children Vol. 37, No. 10 (Summer 1971), pp. 733-738.

Children from work-study and nonwork-study special classes were carefully equated to assure similarity and then compared for employment success after they left school. The nonwork-study group had 75 percent employed and the work-study group had 83 percent employed. The implication is that in the area of preparation for employment there is no evidence to suggest that regular class placement is superior to special class.

Chaires, M.C.

"Improving the Social Acceptance of Unpopular Educable Mentally Retarded Pupils in Special Classes," American Journal of Mental Deficiency No. 72 (1967), pp. 455-458.

Low-status educable mentally retarded children were paired with high-status educable mentally retarded in the preparation of a play for two 15-minute periods weekly for five weeks. Results indicated the children improved significantly in actual peer acceptance and in perceived peer acceptance. However, the design of the study prevents a clear understanding of exactly what factor brought about the changes.

Christoplos, F. and Renz, P.

"A Critical Examination of Special Education Programs," Journal of Special Education Vol. 3, No. 4 (1969), pp. 374-379.

Authors feel segregation serves only to enforce the perceived threat to the goals of regular education. Since it denies the majority the opportunity to become familiar with the handicapped, integration can serve to humanize the attitudes of the normal population.

Cormany, R.B.

"Returning Special Education Students to Regular Classes," Personnel and Guidance Journal Vol. 48, No. 8 (April 1970), pp. 641-646.

Fifteen educable mentally retarded special class students were returned to regular classes solely on the basis of I.Q. scores. Fifteen others were selected for regular placement from a group of 25 teacher-recommended students, who had participated in an orientation and screening program involving the special class teachers, reading specialists, and a counselor. Results indicated that the experimental group had higher grade point averages and lower failure and return rates.

Council for Exceptional Children Dimension Series

Annual Survey of Exceptional Child Research Activities and Issues--1970. Arlington Virginia: Council for Exceptional Children, Information Center, 1971.

The issue cited most frequently by 57 leaders in Special Education was the special class versus regular class placement of mildly retarded children. In addition to being mentioned most often, it was considered to be the one most crucial to future trends in special education.

Council for Exceptional Children

Not All Little Wagons Are Red: The Exceptional Child's Early Years. Report from the Invisible College Conference on Early Childhood. Held January 20-21, 1972, in San Antonio, Texas. Ed. J.B. Jordan. Arlington, Virginia: Council for Exceptional Children, n.d. 191 pp.

A collection of reports based on presentations of the participants, this book reflects the great diversity of approaches to early childhood special education. Major topics are: early intervention, identifying children in need of special help, program models and resources, personnel training, and initiating change. Trends in special education priorities, inservice training, noncategorical approaches, accountability, and federal and state funding are discussed from a variety of viewpoints.

Council for Exceptional Children

Regular Class Placement/Special Classes: Exceptional Child Bibliography Series. Arlington, Virginia: Council for Exceptional Children, ICEC, 1971, 15 pp.

One in a series of bibliographical listings on exceptional children. This publication includes 56 references related to the question of regular or special class placement for exceptional children. Each entry is abstracted and includes tests, journal articles, conference papers, and research reports selected from Exceptional Child Education Abstracts.

Council for Exceptional Children

Special Class Placement - Continuing Debate. Papers presented at the Annual International Convention of the Council for Exceptional Children (48th) Chicago, Illinois/ April 19-25, 1970, 34 pp.

Included are papers dealing with the arguments for and against special class placement, the efficacy of special placement for educable mentally retarded children and the debilitating effects of special placement. Also included are papers concerned with the prospects of the mentally retarded for the future.

Council for Exceptional Children

Trends and Issues in Special Education. Papers presented at the Annual International Convention of the Council for Exceptional Children (49th) Miami Beach, Florida: April 18-24, 1971. ED 052, 398.

Six papers selected from those presented at the CEC Convention. The first paper focuses on child advocacy and the legal and illegal abuses special education pupils are subjected to. The second, addressed to teachers-in-training, deals with effecting change within the existing structure. The third discusses the role of federal assistance to the field. The fourth describes special education programs in Toronto, Canada. The fifth analyzes the Council for Exceptional Children's historical and present roles, and the sixth rebuts criticisms of special education for the mentally retarded.

Darragh, J.

Diagnostic Practices and Special Classes for the Educable Mentally Retarded: A Layman's Critical View. Washington, D.C.: Council for Exceptional Children, 1967, 5 pp.

The author feels that placement of the mildly retarded does not insure greater learning, improved social adjustment, and vocational success. Consequently, the justification for continuing such classes is questioned. Recommends that professional educators at colleges and universities conduct research to determine the value of special classes for the retarded.

Dearborn Board of Education

A Follow-Up and Comparison of Graduates from Two Types of High School Programs for the Mentally Handicapped. Final Report. Dearborn, Mich: Dearborn Public Schools, 1970, 70 pp.

Two groups of educable mentally retarded high school graduates were compared on social, vocational, and economic factors such as job placement, income, and community participation. One group graduated from a self-contained, vocationally oriented program, while the other graduated from a program integrated into the general high school where job experience was concurrent with general education and courses were not specifically vocationally oriented. Results indicated graduates of the integrated general high school program had better attendance records, held more full-time jobs, higher occupational levels and salaries, and participated more fully in community activities.

Deno, E. N.

Instructional Alternatives for Children. Papers prepared for the Exceptional Children Branch of the National Center for the Improvement of Educational Systems by the Leadership Training Institute for Special Education under the Education Professions Development Act. Arlington, Virginia: The Council for Exceptional Children, n.d., 195 pp.

The theme of the 15 papers in this monograph is how to improve the interface between regular and special education services. The programs described focus on three aspects of the problem: 1) how to plan a course of action best suited to individual children, 2) how to train adults to implement the plan, and 3) how to evaluate the plan. Descriptions of reorganization range from single school buildings to whole school districts to long-range planning at the state education agency level.

Dunn, L.M.

"Special Education for the Mildly Retarded - Is Much of It Justifiable?" Exceptional Children Vol. 35, No. 1 (Sept. 1968), pp. 5-22.

Author feels that disadvantaged children who have been labeled as educable mentally retarded need educational opportunities other than the traditional self-contained special class. Reasons stated include: 1) children do better in regular classes, 2) track programs are a violation of the Fifth Amendment, and 3) labeling process is debilitating. Also, he feels that regular classrooms are now better able to cope with individual differences, due to recent innovations such as ungraded classes, programmed materials, team teaching, educational TV, and clinical teaching. Recommendations include the utilization of special educators as team, itinerent, consultant, resource room and/or remedial teacher.

Edgerton, R.G.

The Cloak of Competence: Stigma in the Lives of the Mentally Retarded. Berkeley: University of California Press, 1967, 233 pp.

This book attempts to accurately study the lives and thoughts of 48 retarded adults who had been discharged from a California hospital. Data were collected by personal interviews with the subjects, their friends, and relatives. Major problems upon release from the institution were making a living and getting married. Of the 48 subjects, 44 had undergone "sterilization" prior to their discharge. Most of them were very resentful of this humiliating experience. All subjects felt their institutionalization had been a mistake and attributed their incompetence to the experience of institutionalization. The information presented strongly questions current practices in the labeling and treatment of the retarded in our society.

Erdman, R.L., Wyatt, K.E. and Heller, H.W.

The Administration of Programs for Educable Retarded Children in Small School Systems, Arlington, Virginia: Council for Exceptional Children, 1970, 91 pp.

A booklet designed to assist school districts in rural areas and small communities interested in establishing special education programs, including classes for the educable mentally retarded. Content includes material pertaining to the selection of children, organization of classes, related organizational problems, and curriculum and program alternative approaches such as itinerant teachers and work-study programs.

Farrer, K. and Guest, E.

Cooperative Instructional Services Program For Improving Educational Personnel To Teach Special Education Students In The Regular Classroom - Final Report. Logan, Utah: Utah State University, 1970, 111 pp.

A report of a program designed to train regular class teachers and teacher aides to meet the needs of handicapped and disadvantaged children in regular classes. Training sessions included seminars dealing with the emotional and intellectual needs of exceptional children, observing and recording behaviors, curriculum planning, and practicum experience in a laboratory school. Results indicated improved attitudes toward handicapped children on the part of the participants, and the students improved in academic achievements. Appendix includes sample evaluation forms, data tables, and list of staff and participants.

Flynn, T.M. and Flynn, L.A.

"The Effect of a Part-time Special Education Program on the Adjustment of EMR Students," Exceptional Children Vol. 36, No. 9 (May 1970), pp. 680-681.

Educable mentally retarded children in a regular elementary class were given a daily supplemental 45-minute class period of small group and individual tutoring. Results indicated no significant differences between special class retardates and nonspecial class retardates in terms of school adjustment. More nonspecial class retardates were promoted than special class retardates.

Franseth, J. and Koury, R.

Survey of Research on Grouping as Related to Pupil Learning. Washington, D.C.: Office of Education, Bureau of Elementary and Secondary Education, 1966.

A review of the research pertaining to the relationship between learning and grouping. The effect of ability grouping on achievement motivation is discussed as it relates to gifted and slow-learning children. Other topics discussed are the nongraded concept, individual differences, and the need for flexibility in grouping.

Gallagher, J.J.

"The Special Education Contract for Mildly Handicapped Children," Exceptional Children Vol. 38, No. 7 (March 1972), pp. 527-535.

This article considers the advantages and problems of labeling, and points out how labeling has allowed society to marshal vast resources to attack the problems of mental retardation. It is suggested that the controversy over to label or not label is not the real issue, since some children will be hurt by either decision. The author proposes and discusses a two-year special education contract that would mitigate the damaging effects of labels on children with mild handicaps.

Gampel, D.H., Harrison, R.H. and Budoff, M.

"An Observational Study of Segregated and Integrated EMR Children and Their Nonretarded Peers: Can We Tell The Difference By Looking?" in Studies in Learning Potential Vol. 2, No. 27, Cambridge, Mass.: Research Institute For Educational Problems, 1972, 32 pp.

This study attempted to determine whether there are unique behavorial characteristics of the mentally retarded that can be used for identification purposes. Results indicated that both integrated and special class retardates engaged in significantly less interpersonal interaction than did their non-retarded peers. Both groups were rather passive and tended to avoid engaging in any active behavior that would cause notice. Implications include the need for training the retarded to become more actively involved with others.

Gardner, O.S.

"Out of the Classroom: The Birth and Infancy of the Resource Center at Hauula," Exceptional Children Vol. 38, No. 1 (Sept. 1971), pp. 53-58.

This article deals with the development of a resource center at the Hauula School in Hawaii as an alternative to special class replacement for educable mentally retarded children. The children worked with special education teachers during scheduled periods of time during the day. As a result, most of the children were successfully integrated into the regular classes. Also, the Resource Center teachers were required to consult with the regular class teachers, initiate new teaching techniques, and train other teachers in appropriate methods of instruction.

Goldstein H., Moss, J. and Jordan, L.

A Study of the Effects of Special Class Placement on EMR Children. U.S. Cooperative Research Project No. 619, Urbana, Ill.: University of Illinois, 1965, 245 pp.

A comprehensive and carefully controlled study in which all entering first-grade children in schools in three communities in Illinois were screened. All children having I.Q. test scores below 85 were randomly assigned to regular or special classes. After four years results indicated: 1) both groups had raised their average I.Q.'s. from 75 to 82, 2) neither group was superior in academic achievement, and 3) neither group was superior on a test of social knowledge.

Goodman, H. and others

"Social Acceptance of EMRs Integrated Into A Nongraded Elementary School," in Studies in Learning Potential Vol. 2, No. 20, Cambridge, Mass.: Research Institute for Educational Problems, 1971, 21 pp.

Results of the study indicated both integrated and segregated educable retardates were rejected significantly more often than normal children, that younger children are more accepting of others than older children, that boys express more overt rejection than girls, and that integrated educables are rejected more than segregated ones by boys but not by girls.

Gottlieb, J. and Budoff, M.

"Social Acceptability of Retarded Children in Nongraded Schools Differing in Architecture," in Studies in Learning Potential Vol. 2, No. 28, Cambridge, Mass.: Research Institute for Educational Problems, 1972, 14 pp.

Integrated and segregated educable mentally retarded children were compared for social adjustment in a traditional school building and a noninterior wall school. Findings revealed that the mentally retarded children in the open-floor school were rejected more often than the retardates in the traditional walled school. Although the retardates in the open-floor school were known more often by their normal peers, they were not chosen as friends more often. It was implied that merely removing a child from a special class in and of itself does not necessarily remove the label.

Gottlieb, J. and Budoff, M.

"Attitudes Toward School by Segregated and Integrated Children: A Study and Experimental Validation," in Studies in Learning Potential Vol. 2, No. 35, Cambridge, Mass.: Research Institute For Educational Problems, 1972, 10 pp.

A report of two studies concerning the attitudes of the mildly retarded toward school in several school placements. In the first study, the attitudes of nonretarded and retarded children in segregated and integrated class placements revealed that the integrated group held more positive attitudes than the other groups. The segrated group indicated the most negative feelings. In the second study, mentally retarded children were randomly assigned to integrated and segregated classes with the results being similiar to the first study. Implications include a discussion of the effects of the labeling process.

Gottlieb, J., Hutten, L. and Budoff, M.

"A Preliminary Evaluation of the Academic Achievement and Social Adjustment of EMRs In a Nongraded School Placement," in Studies in Learning Potential Vol. 2, No. 23, Cambridge, Mass.: Research Institute For Educational Problems, 1971, 29 pp.

A comparison of the social adjustment and academic achievement of educable mentally retarded children in a nongraded school with comparable retardates assigned to segregated special classes. Results indicated the integrated retardates expressed more favorable attitudes toward school than their segregated peers. However, the normal children tended to reject the integrated retardates more than the segregated ones. Due to the small population (N=7) of the study, further research is indicated.

Gozali, J. "The Expectancy Phenomena: Implication for Educating the Mentally Retarded," Focus on Exceptional Children Vol. 1, No. 4 (1969), pp. 1-6.

Author feels that teachers of the retarded are likely to respond to students not only in terms of the student's actual abilities, but also in terms of their own attitudes and beliefs as to what the mentally retarded are like. In order to avoid this it is suggested that teacher training programs stress sensitivity training and emphasis on nonverbal communication.

Grosenick, J.K. "Assessing the Reintegration of Exceptional Children into Regular Classes," Teaching Exceptional Children Vol. 2, No. 3 (Spring 1970), pp. 113-119.

By observing the behaviors of exceptional children before and after integration into a regular class the author concluded that the special students were successfully integrated and their placement did not significantly affect the regular class students.

Grosenick, J.K. "Integration of Exceptional Children Into Regular Classes: Research and Procedure," Focus on Exceptional Children Vol. 5, No. 5 (Oct.1971), pp. 1-8.

The author outlined a set of procedures for the integration of special class children into regular classes. The procedure includes determining readiness, preparing for the change, managing initial integration and assessing behavior maintenance. It is suggested as a practical guideline for use by teachers and administrators who wish to integrate special class children into regular classes.

Hammons, G.W. "Educating the Mildly Retarded: A Review," Exceptional Children Vol. 38, No. 7 (March 1972), pp. 565-570.

A comprehensive review of the literature pertaining to the benefits and values of special classes for the retarded. It concludes with a plea for change rather than reaction and that inappropriate practices be altered rather than abolished.

Haring, N.G., Stern, G.G. and Cruickshank, W.M. Attitudes of Educators Toward Exceptional Children. Syracuse, New York: Syracuse University Special Education and Rehabilitation Monograph Series 3, 1958, 238 pp.

A documented statistical examination of the attitudes held by regular class teachers and administrators toward exceptional children and methods to modify these attitudes. Also, included are sample tests used to measure attitude change of teachers, and selected lectures on integrating exceptional children into regular classes.

Havighurst, R.J. "Educationally Difficult Students: What The Schools Can Do," The National Association of Secondary School Principals Bulletin Vol. 49 (1965), pp. 110-127.

The author groups the culturally disadvantaged, mentally retarded, and nonconformers as "difficult" students. Included in this category would be the rebellious "loner" who is often overlooked. Suggested guidelines are presented to help meet the educational needs of these children.

Harvey, J. "To Fix or to Cope: A Dilemma for Special Education," Journal of Special Education Vol. 3, No. 4 (1969), pp. 389-392.

A discussion of the advantages and disadvantages of special education including quotes from leading authorities in the field. Emphasis is on the question of integration versus segregation. The author feels that each of us interprets special education in terms of his own frame of reference, and there is a dire need for special education to provide diagnostic or prescriptive teaching for the various types of exceptional children.

Hayball, H.L. and Dilling, H.J. Study of Students from Special Classes Who Have Been Returned to Regular Classes. Ontario, Canada: Scarborough Board of Education, 1969, 37 pp.

Study was concerned with the effects of regular class placement on slow learners, educable mentally retarded children, children with perceptual and behavioral problems, and multiply-handicapped children. Most of the children except the slow learners and educable mentally retarded achieved according to expectations. Teachers reported similar personal and social adjustments for all groups. Generally, all of the students held positive attitudes toward the regular class experience with the mildly retarded being the most positive. Appendix includes samples of the teacher questionnaire and student interview questions.

Hodgson, F.M. "Special Education - Facts and Attitudes," Exceptional Children Vol. 30, No. 4 (Jan. 1964), pp. 196-206.

A national study by the Los Angeles Board of Education secured data from professionals in respect to the definition, function, organization, and administration of a special education program. Organizational plans discussed in detail are the segregation, partial segregation, cooperative resource room, and itinerant teaching plan.

Holowinsky, I.Z. "Special Child or Retarded Child? Some Special Problems of Class Placement," Training School Bulletin, No. 60 (Nov. 1963), pp. 118-122.

A discussion of some of the problems related to the placement of a child in a public school special class. Topics included are the differences between functional and permanent retardation, the validity of intellectual evaluations, eligibility criteria, and the importance of placing a child in an educational environment that meets his needs.

Iano, R.P. "Shall We Disband Special Classes?" Journal of Special Education Vol. 6, No. 2 (Summer 1972), pp. 167-177.

A critical review of the major reasons that have justified the placement of retardates in special classes. The author suggests that decisions on selection, placement, and programming for all children in a school be made cooperatively by regular and special education teachers. Also, special educators need to take the initiative in developing greater coordination of effort with general education.

Jansen, S., Mogens, C. and others "Is Special Education Necessary? - Can This Program Possibly Be Reduced?" Journal of Learning Disabilities Vol. 3, No. 9 (Sept. 1970), pp. 434-439.

Although special educators in Denmark have attempted to implement preventive measures, they have not succeeded in reducing the need for special education programs. At the present time about 15 percent of all Danish school children are receiving remedial instruction. The issue of segregation versus integration is of great concern. Opinions are expressed concerning the possibilities of reducing the need for special education by an overall expansion of the general educational facilities.

Johnson, G.O. "Special Education for the Mentally Handicapped: A Paradox," Exceptional Children Vol. 29, No. 2 (Oct. 1962), pp. 62-69.

A comprehensive review of the literature concerning the effectiveness of special classes for the retarded. It was concluded that retarded children in regular classes do as well or better than their peers assigned to special classes, in terms of academic achievement.

Johnson, G.O. A Comparative Study of the Personal and Social Adjustment of Mentally Handicapped Children Placed in Special Classes With Mentally Handicapped Children Who Remain in Regular Classes. Syracuse, New York: Syracuse University Research Institute, 1961.

Results indicated that comparisons of personal and social adjustments showed no significant differences between special class retarded and regular class retarded children. Regular class retardates achieved statistically lower scores on personal and social adjustment than did children of normal intelligence in the same classrooms. Special class children were found to be much like the normal children in peer acceptance, but special class children were significantly more accepted by their peers than were retarded children in the regular grades.

Johnson, G.O. and Kirk, S.A.

"Are Mentally Handicapped Children Segregated in the Regular Grades," Exceptional Children Vol. 17 (1959), pp. 65-68, 87-88.

Results of the study indicated mentally retarded children in regular classes were isolated and rejected by their peer groups, despite attempts by the teachers to integrate them into the regular classroom. It was concluded that the physical presence of a retarded child in a regular class does not guarantee social integration.

Jones, R.L.

"Labels and Stigma in Special Education," Exceptional Children Vol. 38, No. 7 (March 1972), pp. 553-564.

This article points out that insufficient attention has been given to the fact that certain special education labels imply deficiencies and shortcomings in children, and that no systematic inquiry has been made of children's perceptions of the labels and services offered them. Results of the study indicate children reject the labels "culturally disadvantaged" and "deprived," and that few strategies for the management of stigma have been developed by teachers.

Jordon, T.E. and DeCharms, R.

"The Achievement Motive in Normal and Mentally Retarded Children," American Journal Mental Deficiency No. 64 (1959), pp. 457-466.

Forty-two mentally retarded children in special classes were compared with 60 mentally retarded children in regular classes in respect to achievement motivation as measured by the TAT. Results indicated the retarded children in the special classes had less fear of failure than the retardates in regular classes, which might indicate that the pressure for academic achievement in regular classes causes a fear of failure, and lack of empahsis on academic achievement in special classes lessens the fear of failure.

Karnes, M.B.

"The Slow Learner: Administrative Plans That Help," NEA Journal No. 48 (Oct. 1959), pp. 22-23.

A discussion of the basic principles involved in providing the proper education for the slow learner. Topics covered include early identification, recruitment of teachers, acceptance of the program by others, curriculum sequencing, evaluation, integration, guidance, and counseling. Emphasis is on flexible grouping and realistic goals for the individual child.

Kauppi, D.R.

"The Emperor Has No Clothes: Comments on Christoplos and Renz," Journal of Special Education Vol. 3, No. 4 (1969), pp. 393-396.

The author feels that empirical evidence does not support the philosophical basis of special education. Also, segregation on the principle of disability does not yield benefits. In fact, segregation may be considered to be discriminatory.

Kern, W.H. and Pfaffle, H.A.

"A Comparison of Social Adjustment of Mentally Retarded Children in Various Educational Settings," American Journal of Mental Deficiency No. 67 (1962), pp. 407-413.

Purpose of study was to compare the social adjustment of mentally retarded children in three educational settings - special classes, special schools, and regular classes. The California Test of Personality was individually administered to all subjects. Results indicated less satisfactory adjustment on the part of the regular class children on two of the six subtests. Authors concluded that retardates in special classes or special schools show more satisfactory social adjustment than similar children in the regular grades.

Kirk, S.A.

"Research in Education." In H.A. Stevens and R. Heber (Eds.) Mental Retardation: A Review of Research. Chicago: The University of Chicago Press, 1964, pp. 57-99.

An extensive review of the research pertaining to the efficacy of special classes. Although the majority of the studies indicate that retarded children make as much or more progress in regular grades as they do in special education, the author emphasizes the pitfalls inherent in these studies, and concludes that until well-controlled, longitudinal studies are conducted, the benefits or detriments of special classes will remain partly in the realm of conjecture.

Knoblock, P. and Goldstein, A.

The Lonely Teacher. Boston: Allyn and Bacon, Inc., 1971, 154 pp.

An analysis of the perceptions of special education teachers concerning their relationships to their children. Divided into four parts: Part I explores the theme of teachers' loneliness; Part II discusses group approaches for greater communication between staff members; Part III describes actual group processes; and Part IV analyzes the quality of individual teacher-pupil relationships. Descriptions of what really happens when teachers and children interact are illuminated by anecdotal material. Main theme is that group process approaches can aid the growth potential of teachers as much as children.

Knox, S.C.

"Turnover Among Teachers of the Mentally Retarded," Exceptional Children Vol. 35, No. 3 (Nov. 1968), pp. 231-235.

Purpose of the study was to identify some of the variables related to teacher turnover. The method employed was to compare a group of teachers who had taught mentally retarded children for two years or less with a group who had taught for a longer period. Results indicated those who quit with two or less years of experience tended to be younger men, employed in larger school systems with a minimum of certification. No differences were found with regard to number of years of training, differential salary, or laboratory experience.

Kolstoe, O.P. "Programs for the Mildly Retarded: A Reply to the Critics," Exceptional Children Vol. 39, No. 1 (Sept. 1972), pp 51-55.

The author closely examines some of the most widely quoted research supporting the assumption that methods of identifying the retarded, and programs for educating them are adequate. He concludes that the present criticisms aimed at special classes are not so much criticisms of the classes as they are criticisms of some of the administrative aspects of the program, such as: 1) the use of I.Q. test scores to identify the retarded, 2) failure to reevaluate the effectiveness of the program on a regular basis and 3) a lack of proper preparatory work experiences in the curriculum. As a summary, he offers possible solutions with the suggestion that a variety of special programs be instigated in addition to, not in lieu of, special classes.

Kolstoe, O.P. and Frey, M.R. A High School Work-Study Program for Mentally Subnormal Students. Carbondale, Ill.: Southern Illinois University Press, 1965, 179 pp.

This book describes the characteristics and needs of the mentally retarded, and outlines an ideal four-year high school work-study program. Emphasis is placed upon integration and nonacademic vocational experiences for the retarded. Also includes specific curriculum guidelines and sample evaluation forms.

Lavender, J. "Public School Programs for Retarded Children," Digest of the Mentally Retarded Vol. 5, No. 2 (1969), pp. 97-104.

A description of past and present educational services for the mentally retarded in the public schools of Connecticut. There has been a 150 percent increase in the number of classes for the retarded, and a 400 percent increase in state aid during the past ten years. A strong emphasis has been placed upon the integration of normal and retarded children whenever feasible.

Lawrence, E.A. and Winschel, J.F. "Self-Concept and the Retarded: Research and Issues," Exceptional Children Vol. 39, No. 4 (Jan. 1973), pp. 310-319.

A review of the research concerning the assumption that retarded individuals possess negative self-concepts. Authors conclude that segregated class placements do not develop positive self-concepts among retarded children. However, much of the research in this area is questionable due to the validity and standardization procedures of the self-concept scales employed. The need for additional research pertaining to the effectiveness of psychotherapy or counseling in improving the self-concept of retardates is stressed.

Levine, S.

Labeling and Segregation of Exceptional Children: Social Distance Creating Phenomena. Unpublished manuscript. San Francisco: California State University, San Francisco, 1972.

Author feels that placing children in classes for the mentally retarded gives low socioeconomic status parents a cross-generational sense of hopelessness. They can predict only that the future of their children will not be substantively different from their own. Special classes for the mentally retarded are perceived by such parents as an extension of the welfare agency concept rather than as vehicles to provide "equal opportunity" or equal access.

Lilly, M.S.

"Special Education: A Teapot in a Tempest," Exceptional Children Vol. 37, No. 1 (Sept. 1970), pp. 43-49.

A discussion of policies and practices in the field of special education and their relevancy to learning and behavior problems. Emphasis is on the idea that self-contained special classes should be discontinued for all but the severely handicapped. Also, the operations of the Council for Exceptional Children and The Bureau for Education of the Handicapped are reviewed in relation to the need for change. A new approach for defining exceptionality is presented.

Lilly, M.S.

"A Training Based Model for Special Education," Exceptional Children Vol. 37, No. 10 (Summer 1971), pp. 745-749.

Presents a training based model for special education services, the goal of which is to equip regular classroom teachers with the skills necessary to cope with exceptional children. The model places the responsibility of rectifying a classroom problem on the regular teacher, with support from instructional specialists, although the author does not call for an administrative edict to do away with all special classes. Included are implications for direct service functions for administrative teacher education and legislation.

Long, N.J., Morse, W.C. and Newman, R.G. (Eds.)

Conflict in the Classroom: The Education of Children with Problems. Second ed., Belmont, Calif.: Wadsworth Publishing Co., Inc., 1971, 587 pp.

This collection of papers is distinguished by a section composed of excerpts from modern literature describing what it feels like to be emotionally disturbed. Current issues such as drug addiction and the new attitudes toward psychotherapy are also discussed. Other sections are identifying and diagnosing the disturbed child, the kinds of help available, teaching techniques, and hygenic management. The last part covers evaluation problems. Bibliography.

MacMillan, D. "Special Education for the Mildly Retarded: Servant or Savant" Focus on Exceptional Children Vol. 2, No. 9 (Feb. 1971), pp. 1-11.

A reassessment of the evidence presented by Professor Dunn regarding the integration of educable mentally retarded children into regular classes. The author warns against polarization on the issue of special class versus regular class placement; instead calls for debate and research on a larger issue, namely "To what extent, and under what conditions, can a wider range of individual differences be accommodated in the regular class than is presently the case?"

Melcher, J.W. "Some Questions From a School Administrator," Exceptional Children Vol. 38, No. 7 (March 1972), pp. 547-551.

The need for a greater integration of special education services within the mainstream of general education is discussed. Author feels that many regular classroom teachers may not be ready to include the handicapped, that principals generally have little academic background on the needs of the handicapped, and that broader certification requirements are needed for special education teachers.

Meyen, E.L. "The Education of the Mentally Retarded - A Systematic Error in Curriculum Development," Education and Training of the Mentally Retarded Vol. 3, No. 4 (1968), pp. 164-168.

Since retarded children learn as much or more in regular classes than they do in special classes, the author feels that a systematic curriculum should be developed by general education curriculum specialists in cooperation with special educators. If educational objectives are clearly developed, stated, and reflected in a definite curriculum, then the apathy of general education toward the retarded will be greatly reduced.

Meyerowitz, J.H. "Peer Groups and Special Classes," Mental Retardation Vol. 5, No. 5 (1967), pp. 23-26.

A study of the effects of placement on personality characteristics of the mentally retarded. Results indicated a trend toward more self-derogation in children placed in special classes compared to their peer group in regular classes.

Meyerowitz, J.H. "Self-derogations in Young Retardates and Special Class Placement," Child Development No. 33 (1962), pp. 443-451.

A study of self-derogatory statements made by matched groups of first-graders. Of 120 entering first-graders with I.Q.'s of 60 to 85, half were randomly assigned to special classes and half retained in regular classrooms. Also, 60 normal first-graders were tested. Results indicated the children in the special class made a greater number of self-derogatory statements at the end of the year than did those in regular classes.

Miller, J.C. and Schoenfelder, D.S.

"A Rational Look at Special Class Placement," Journal of Special Education Vol. 3, No. 4 (1969), pp 397-403.

It is the authors' viewpoint that the recent criticisms of special classes while claiming to be logical, have been ill-concealed emotional outbursts. Many of the critics have been guilty of faulty and incomplete reporting. They feel that the criticism that special education discriminates against minority groups is invalid. More research is recommended to ascertain the effects of integrated and segregated placements of the handicapped on both normal and exceptional children.

Mooney, T.J.

A Study of the Efficacy of the Administrative Placement of Educable Mentally Retarded Children in Various Educational Settings When Compared on a Self-Concept Scale. Unpublished doctoral dissertation, Syracuse, New York: Syracuse University, 1969.

A comparison of the expressed self-concept of retarded children in three educational settings: 1) a special class partially integrated with nonretarded students, 2) a partially segregated class with little integration, and 3) a special school group in a completely segregated location. Results indicated a significant difference in self-concept favoring the partially segregated group.

Muehlberger, C.E.

"Factors Related to the Acceptance of Special Classes Within the Public Schools," Journal For Special Educators of the Mentally Retarded Vol. 6, No. 2 (1970), pp. 104-108.

Author feels that a more harmonious relationship between special and regular classes can be attained by: 1) integration of special class students, 2) orientation of faculty towards the nature and needs of the retarded, 3) special activities, and 4) improving the attitudes of the retarded toward others. Also, the attitudes, mannerisms, and personal appearances of the retarded will greatly determine their acceptance by others.

Nelson, C.C. and Schmidt, L.J.

"Forum: The Question of the Efficacy of Special Classes," Exceptional Children Vol. 37, No. 5 (Jan. 1971), pp. 381-384.

The philosophical issues surrounding the controversy in special education of special class placement versus regular class placement for handicapped children are discussed. Three areas of difficulty in solving the controversy are noted to be adherence to the past, approaching with a priori conclusions, and the failure to critically examine the present constructs in use. Presuppositions of special class efficacy and the need for empirical validation are explored.

Peach, W. and Beverly, L.

"Automated Reading Instruction for Educable Mentally Retarded Adolescents," Slow Learning Child Vol. 16, No. 1 (1969) pp.15-19.

Purpose of this study was to compare the effectiveness of reading instruction machines (TACH-X and Controlled Reader) with regular classroom instruction in teaching EMR adolescents to read. The Gates Reading Survey was used as a pre- and post-test. Results indicated the subjects taught with the reading instruction machines improved 0.3 to 5.3 grades, while the control group's reading improvement varied from -0.1 to 2.4 grades. Greatest improvement was shown in the areas of vocabulary, speed, and comprehension.

Porter, R. B. and Milazzo, T. C.

"A Comparison of Mentally Retarded Adults Who Attended Special Class With Those Who Attended Regular Class," Exceptional Children Vol. 24 (April 1958), pp. 410-420.

This study compared mentally retarded children from regular classes with the mentally retarded from special classes and found that special class graduates had longer periods of full-time employment and tended to change residence less often. It was felt that their experience in a special class had aided them most in the area of social competency.

Presland, J.

"Who Should Go to E. S. N. Schools?" Special Education Vol. 59, No. 1 (March 1970), pp. 11-16.

Both sides of the issue of segregation versus integration are discussed with references to recent studies concerning the educable mentally retarded. The conclusion reached was that placement decisions should always take into account the child's intelligence level, medical considerations, maturity, special abilities and disabilities, academic achievement, home background, attitudes toward school, age, and the availability of alternate special provisions.

Reger, R. and Koppmann, M.

"Out of the Classroom: The Child Oriented Resource Room Program," Exceptional Children Vol. 37, No. 6 (Feb. 1971), pp. 460-462.

A description of Buffalo's Child Evaluation Center and Resource Room Program for exceptional children. Information is included regarding the criteria and admission procedures, schedule arrangements, program content, and the role of parents and teachers. Due to the success of the program it was greatly expanded after a two-year period.

Renz, P. and Simenson, R.J.

"The Social Perception of Normals Toward Their EMR Grade-Mates," American Journal of Mental Deficiency Vol. 74, No. 3 (Nov. 1969), pp. 405-408.

Purpose of study was to compare the social perceptions and attitudes of normal children toward other normals and educable mentally retarded children in special classes. Fifty-seven randomly selected normal children rated 14 special class retardates and 14 randomly selected normals. Findings revealed that the special class retardates were not rejected any more than their normal peers, and that the normal children used the same criteria to judge and describe the retardates that they used for other normals.

Reynolds, M.C. and Davis, M.D.

Exceptional Children in Regular Classrooms. Papers prepared for the Leadership Training Institute/Special Education, sponsored by the Bureau for Educational Personnel Development, U.S. Office of Education. Distributed by Dept. of Audio-Visual Extension, University of Minnesota, Minneapolis, Minn., n.d , 125 pp.

The Bureau of Educational Personnel Development (BEPD) of the U.S. Office of Education supports a variety of training programs in Special Education. This collection of essays is one of their attempts to stimulate thinking on how to reintegrate handicapped children into the regular classroom. Includes 14 papers that review various philosophies and strategies for accommodating exceptional children, all of which agree that integration is both desirable and necessary.

Rotberg, J.M.

"Defining the Task of Teachers of the Educable Mentally Retarded," Education and Training of the Mentally Retarded Vol. 3, No. 3 (Oct. 1968), pp. 146-149.

Critical incident techniques were used to determine the task of teachers of educable mentally retarded children. Professional educators observed and recorded incidents of significant teacher behavior in the classroom. Results indicated that principals and supervisors differed significantly from teachers in their emphasis on particular aspects of the teaching task. Also, the results have significant implications for all teachers.

Rucker, C., Howe, C.E. and Snider, B.

"The Participation of Retarded Children in Junior High Academic and Nonacademic Regular Classes," Exceptional Children Vol. 35, No. 8 (April 1969), pp. 612-623.

Results of this study indicated that retarded children who had been participating in regular classes were significantly less accepted than the nonretarded, equally low in the social structure of both academic and nonacademic classes, and apparently unaware of their low social position in regular classes. Also, their level of acceptance in the special class was positively related to their degree of acceptance in regular classes.

Sampson, O. "Children in a World Anart," Special Education Vol. 60, No. 2 (June 1971), pp. 6-9.

A survey of administrators and remedial teachers in comprehensive schools in England was conducted to determine the extent of integration of remedial pupils and staff into the system. Administrative organization, remedial teacher reaction, concessions to segregation, modification for integration, and teacher integration are discussed.

Schonell, F.J. "The Slow Learner - Segregation or Integration," Educational Research Vol. 5 (Feb. 1963), pp. 146-150.

A report on the symposium "Slow Learner" in which international educators expressed their opinions concerning the integration of the mildly retarded. Countries represented were Australia, Canada, Denmark, Great Britain, Holland, Japan, New Zealand, Russia, Sweden, and the United States. Unlike the United States, most countries reported a strong emphasis on the practice of segregating the retarded.

Schurr, L.T. and Brookover, W.B. The Effect of Special Class Placement on the Self-Concept of Ability of the Educable Mentally Retarded Child. Washington, D.C.: DHEW, Bureau of Handicapped Children and Youth, 1967, 199 pp.

Results indicated educable mentally retarded children in special classes showed an increase on the General Self-Concept of Ability Scale during an 18-month period, while those reassigned to the regular classes all declined in self-concept of ability. Special class placement was found to have a positive effect on the children's self-concept of ability, which was based on self-comparison with class peers. It is suggested that the students may have internalized the negative attitudes of others about the special class and not about their ability.

Schwartz, L. "An Integrated Teacher Education Program for Special Education - A New Approach," Exceptional Children Vol. 33, No. 6 (Feb. 1967), pp. 411-416.

Author outlines an ideal teacher educator program which emphasizes the training of clinical teachers to provide diagnosis and remediation for a variety of learning difficulties presented by exceptional children. In order to move in this direction, the author feels we must abandon the traditional practice of labeling children according to a specific handicap.

Schwarz, R.H. "Mental Age As It Relates to School Achievement Among Educable Mentally Retarded Adolescents," Education and Training of the Mentally Retarded Vol. 4, No. 2 (April 1969), pp. 53-58.

This study was concerned with the discrepancy between actual achievement and expected achievement according to mental age

among educable mentally retarded children in special classes. It was found that teachers were concentrating their efforts on the lower grade retardates in the class, thus increasing the gap between actual achievement and expected achievement among the higher grade retardates. As a result, the author questions the effectiveness of homogenous special education classes for the educable mentally retarded.

Schwarz, R. and Shores, R.E. "The Academic Achievement of EMR Students and Social Class," American Journal of Mental Deficiency Vol. 74, No. 3 (1969), p. 338-340.

Mildly retarded children enrolled in special education classes were grouped according to age and socioeconomic level. Reading and arithmetic achievement levels of the groups were measured and compared. Results indicated middle socioeconomic level children achieved at a higher level, and a difference in reading skills appeared to increase as a function of age and socioeconomic level.

Siegel, E. Special Education in the Regular Classroom. New York: John Day, 1969, 171 pp.

This book attempts to provide teaching ideas, methods, curriculum strategies, and general advice to the regular classroom teachers who may be teaching mildly handicapped children in their classes. Author feels that teachers can help these children deal with problems of immaturity, coordination, anxiety, self-concept, abstract thinking, and behavior with proper support from supervisors and administrators.

Smith, R.M. Clinical Teaching: Methods of Instruction for the Retarded. New York: McGraw-Hill, 1968, 292 pp.

This book outlines the "clinical teaching" method which emphasizes the value of identifying the relative strengths and weaknesses of each child and providing a highly structured and stimulating environment. Curriculum development should be based upon the learning characteristics and behaviors of the mentally retarded child. Stresses the use of daily lesson plans, homogenous grouping, data from psychological evaluations, daily record keeping, and classroom experimentation.

Sparks, H.L. and Blackman, L.S. "What is Special About Special Education Revisited: The Mentally Retarded," Exceptional Children Vol. 31, No. 7 (Jan. 1965) pp. 242-247.

A discussion of special class placement versus regular class placement. Author feels that the evidence indicating special class placement does not promote academic achievement and questions the adequacy of the special class social environment. Recommends the importance of research in the area of teacher preparation for teachers of the mildly retarded.

Sheila, M. "When You Wish Upon A Star: The Self-Fulfilling Prophecy and Special Education," Education and Training of the Mentally Retarded Vol. 3, No. 4 (1968), pp. 189-193.

Author feels that expectations held by the special education teacher can be transmitted to serve as clues for modifying the behavior of the child. A child who is expected by the school to learn does so; the child of whom little is expected produces little. If more achievement were expected of special class students, more achievement possibly might occur.

Sheperd, G. "The Education of Educable Mentally Retarded Students in Secondary Schools: A Review of the Literature," Curriculum Bulletin Vol. 23, No. 280 (July 1967), pp. 1-31.

A review of literature, focusing on the efficacy of special class placement, follow-up studies of the retarded curriculum organization and content, and occupational prognosis.

Stanton, J.E. and Cassidy, V.M. A Study of Differences Between Children in Residential School Classes and Special and Regular Classes in Ohio. Columbus, Ohio: College of Education, Ohio State University, 1961, 91 pp.

A study of differences between children in residential school classes and special and regular classes in Ohio is presented as part of an investigation of factors involved in the educational placement of educable mentally handicapped children. Observations about the residential educational environment alone are made, and a statistical comparison with special and regular class populations is done. Conclusions are drawn regarding the results of different types of educational placement.

Symposium "Segregation Versus Non-Segregation of Exceptional Children," Journal of Exceptional Children Vol. 12 (May 1946), pp. 235-240.

Views on segregation and nonsegregation of exceptional children expressed by members on a panel at the Twenty-Second Annual Meeting of the International Council for Exceptional Children. The conclusion reached was that "it would seem right, therefore, that, with our knowledge of modern education methods, a more scientific treatment than segregation be afforded all children within the school."

Thurstone, T.G. An Evaluation of Educating Mentally Handicapped Children in Special Classes and in Regular Classes. Washington, D.C.: North Carolina University, Chapel Hill, Office of Education, DHEW, 1959, 259 pp.

A comparison of mental development, academic achievement, social adjustment, and physical growth and coordination between retardates in regular and special classes. Population was drawn from rural

and large and small school districts. Results indicated that the retardates in special classes were superior in social and physical development, but inferior in academic achievement to their peers in regular classes.

Valett, R.E. "The Learning Resource Center for Exceptional Children," Exceptional Children Vol. 36, No. 7 (March 1970), pp. 527-530.

A description of how a Learning Resource Center can meet the needs of exceptional children in the public schools. Services include individualized instruction, sequenced programming, and the development of prescriptive teaching approaches. Strong emphasis is placed upon inservice training and parent education.

Valetutti, P. "Integration vs. Segregation: A Useless Dialectic," Journal of Special Education Vol. 3, No. 4 (1969), pp. 405-408.

Author emphasizes the rationale and benefits of segregating exceptional children. Since the exceptional child integrated into the regular classroom may be a disruptive influence, the practice of segregation can provide legitimate relief for the classroom teacher. Also, segregation can sometimes improve the self-image of the rejected retardate. Of greatest importance are teacher values and attitudes and their influence on pupil self-perception and performance.

Warner, F., Thrapp, R. and Walsh, S. A Survey of Some of the Attitudes of 369 Children Toward Their Placement in a Special EMR Class. Project No. 9233, Frederic Burk Foundation/Faculty Development Fund, San Francisco: California State University, 1972, 23 pp.

Three hundred and sixty-nine children in special classes for the mildly retarded were asked to respond to the following questions: 1) Do you like being in a special class? 2) Would you rather be in some other class? 3) Why do you think you are in a special class? 4) What do you like most about being in a special class? and 5) What do you like least about being in a special class? Results did not support the assumption that most children resent their special class placement or are desirous of reassignment to a regular class. The most frequently cited reason for discontent was their interpersonal relationships with retarded peers.

Weintraub, F.J., Abeson, A.R., and Braddock, D.L. State Law and Education of Handicapped Children: Issues and Recommendations. Arlington, Virginia: The Council for Exceptional Children, n.d., 142 pp.

This book is meant to serve as a guide for those seeking a direction, rationale, or model for legal change. Recent major legal decisions are discussed relating to areas of state definitions of disability and eligibility, validity of placement, discriminatory placement of minority groups, parents' rights, and ability grouping. Of particular interest is the section on model statutes intended for those wishing to revise or update the laws of their state relating to the education of handicapped children.

Welch, E.A. — The Effects of Segregated and Partially Integrated School Programs on Self-Concept and Academic Achievement of Educable Mental Retardates. Unpublished doctoral dissertation, Boulder, Colo.: University of Denver, 1965.

One group of EMR children was assigned to a segregated special class, the other group to a partially integrated class. None of the children had had previous experience with any type of special education. Results indicated the integrated subjects showed a significant decrease in the number of derogatory statements they attributed to themselves, with the reverse true for the retarded segregated group. All groups made significant gains in reading, spelling, and arithmetic, with the retarded integrated group making significantly greater gains in reading than the retarded segregated group. Author concludes that children segregated on the basis of intellectual inferiority not only perform less adequately, they more often see themselves as inadequate and rejected.

Winford, B.J. — Achievement of Educable Mentally Handicapped Children as Affected in the Level of Teacher Preparation. Ed. D. Dissertation, Charlottesville, Virginia: University of Virginia, 1964, 54 pp.

Purpose of the study was to determine the effectiveness of teachers in special public school classes for the mildly retarded who differed in the degree of their special preparation, and the manner of obtaining their preparation. Results indicated that the mildly retarded children taught by teachers with part-time preparation achieved higher reading scores than the children taught by teachers with full-time preparation. Implications are discussed.

Wrightstone, J.W. and others — A Comparison of Educational Outcome Under Single-Track and Two-Track Plans for Educable Mentally Retarded Children. Washington, D.C.: DHEW, Office of Education, CRP No. 144, 1959, 299 pp.

This study compared the changes in the EMR enrolled in an experimental two-track (homogenous) program with those enrolled in a one-track program in New York City. Authors concluded that there was no evidence, based on their data, to support either homogenous or heterogenous grouping and that the achievement of both groups was below their mental age expectation.

Zito, R.J. and Bardon, J.I. — "Achievement Motivation Among Negro Adolescents in Regular and Special Education Programs," American Journal of Mental Deficiency Vol. 74, No. 1 (July 1969); pp. 20-26.

Results indicated that Negro adolescents have achievement motivation comparable to others from the same socioeconomic level. Also, they are more influenced by success than by failure. Experience in special class tended to make them cautious in setting goals and to anticipate failure to achieve goals, whereas those in regular classes anticipated success and had higher levels of academic achievement.